# THE IMPERIAL GAZETTEER OF INDIA

W W HUNTER, CSI CLE, LLD,

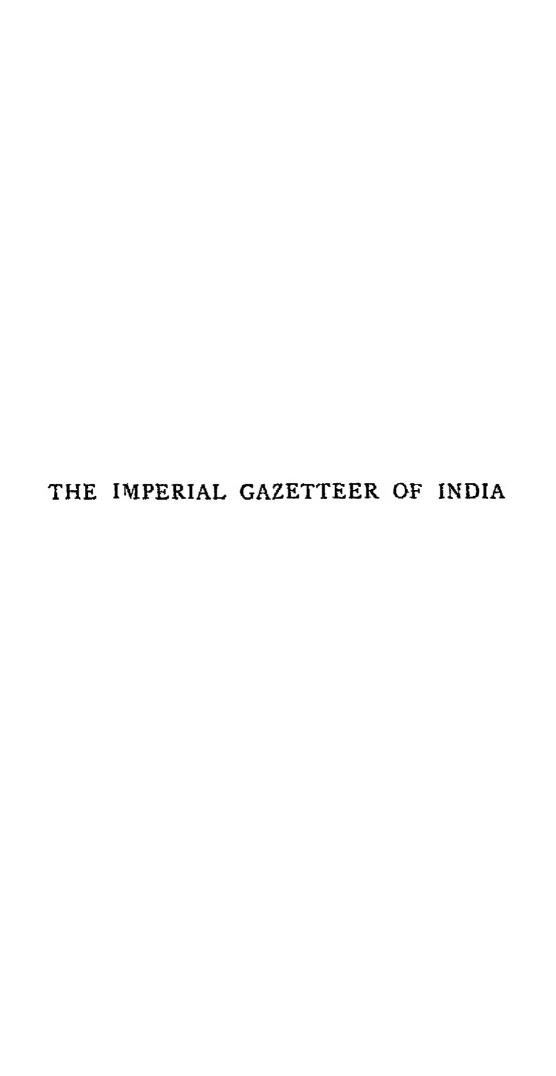
DIRECTOR GENERAL OF STATISTICS TO THE GOVERNMENT OF INDIA.

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SECOND EDITION

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#### PREFACE TO THE SECOND EDITION

THIS book tries to present, within a small compass, an account of India and her people. The materials on which it is based are condensed from my larger works In 1869, the Government of India directed me to execute a Statistical Survey of its dominions,-a vast enterprise whose records now make 128 printed volumes, aggregating 60,000 pages. The scale of the opera tions, although by no means too elaborate for the administrative purposes for which they were designed necessarily placed their results beyond the reach of the general public. The hundred volumes of The Statistical Survey were therefore reduced to a more compendious form as the twelve volumes of The Imperial Gazetteer of India The present book distils into one volume the essence of the whole.

I have elsewhere explained the mechanism by which the materials for the Statistical Survey were collected in each of the 240 Districts, or territorial units, of British India. Without the help of a multitude of fellow-workers, the present volume could never have been written. It represents the fruit of a long process of continuous condensation. But in again acknowledging my indebtedness to brethren of my Service in India, I wish to specially commemorate the obligations which I also owe to a friend at home. Mr J S Cotton, late Fellow of Queen's College, Oxford, has rendered important aid at many stages of the work

<sup>1</sup> See Preface to Volume I of The Imperial Gazetteer of India,

u INDIA

Continuous condensation, although convenient to the reader, has its perils for the author. Many Indian topics are still open questions with regard to which divergences of opinion may fairly exist. In some cases, I have been compelled by brevity to state my conclusions without setting forth the evidence on which they rest, and without any attempt to combat alternative views In other matters, I have had to content myself with conveying a correct general impression while omitting the modifying details For I here endeavour to present an account, which shall be at once original and complete of a continent inhabited by many more races and nations than Europe, in every stage of human develop ment, from the polyandric tribes and hunting hamlets of the hill jungles to the most complex commercial communities in the world. When I have had to expose old fables, or to substitute truth for long accepted errors, I clearly show my grounds for doing Thus in setting aside the legend of Mahmud the Idol-Breaker I trace back the growth of the myth through the Persian Historians, to the contemporary narrative of Al Biruni (970-1029 AD) The calumnies against Jagannáth are corrected by the testimony of three centuries from 1580, when Abul Fazl wrote, down to the police reports of 1870. Macaulay's somewhat fanciful story of Plassey has been told afresh in the words of Clive's own despatch. The history of Christianity in India is written, for the first time, from original sources and local inquiry

But almost every period of Indian history forms an arena of controversy. Thus, in the early Sanskrit era, each date is the result of an intricate process of induction, the chapter on the Scythic inroads has been pieced together from the unfinished researches of the Archæo logical Survey and from local investigations, the growth of Hinduism, as the religious and social nexus of the Indian races, is here for the first time written. In

INDIA vii

attempting to reconstruct Indian history from its original sources in the fewest possible pages, I beg oriental scholars to believe that, although their individual views are not always set forth, they have been respectfully considered. I also pray the English reader to remember that, if he desires a more detailed treatment of the subjects of this volume, he may find it in my larger works.

 $\mathbf{W} \mathbf{W} \mathbf{H}$ 

March 1886

# TABLE OF CONTENTS

# GENERAL PLAN

			PAGE
Physical Aspects	PAGR   1-42	Early European Settlements,	356-377
The Population of India,	43-52	History of British Rule,	378-430
The Non Aryan Races	5.5-74	British Administration of India	431-481
The Aryans in Ancient India	75-131	Agriculture and Products,	482-544
Buddhism in India,	132-162	Means of Communication	545-554
The Greeks in India,	163-173	Commerce and Trade	555-597
Scythic Inroads into India	174-190	Arts and Manufactures	598-617
Rise of Hinduism,	191-228	Mines and Minerals,	618-630
Christianity in India	229-267	Geology	631-640
Early Wuhammadan Rulers,	268-289	Meteorology	641-651
The Mughal Empire	290-316	Zoology and Botany	652-664
The Marátha Power	317-324	Vital Statistics,	665-686
The Indian \ernaculars and		Statistical Appendices I X	687-703
their Laterature,	3 <sup>2</sup> 5~355	Index,	705~747
· ·	,	•	

# CHAPTER I

## PHYSICAL ASPECTS.

General Description of India, Boundaries,	1-4
The Three Regions of India,	4
First Region, the Himálayas, their Scenery and Products,	4-10
Second Region, the Northern River Plains,	10-34
The Great Rivers, their Work, Land making,	19-33
The Indus Brahmaputra, and Ganges,	10-16
The Gangetic River System, the Highway of Bengal,	16-20
Great Gangetic Cities,	20, 21
Three Stages in the Life of an Indian River,	21, 22
Delta of the Ganges ats Age and Process of Formation,	23-28

22222 01 001122112	
TTT . TO	PAGE
The Rivers as Highways and as Destroyers,	29-32
Scenery and Crops of the Northern River Plains	32-34
Third Region of India, the Southern Table-land,	34-41
The Deccan, the Ghats, and their Passes,	35-38
The Four Forest Regions of Southern India,	38-40
Crops and Scenery of Southern India,	40 41
British Burma, its Geography and Products	41, 42
CHAPTER II	
THE POPULATION OF INDIA	
Feudatory India the Chiefs and their Powers,	43
The Twelve British Provinces, how governed,	43, 44
Population Tables	44 45
Pressure of Population overcrowded Districts	46
Under peopled Provinces the immobile Indian Peasant,	47
Nomadic System of Husbandry,	47
The Land and Labour Question in India, Serfdom,	48, 49
Unequal Pressure of Population, its Remedies,	49, 50
Population of India in 1872 and 1881 Increase,	50
The Ethnical Elements of the Indian People	5t, 52
CHAPTER III	
THE NOV ARYAN RACES.	
Kistvaen Builders, Flint and Bronze Periods	53
The Non Aryans of Vedic India described	53 54
Andaman Islanders, Anamalai Hill Tribes,	55
Polyandry among the Nairs, the Gonds	55, 56
Leaf wearing Juangs of Orissa, Himálayan Tribes	56, 57
The Santáls, Village and Tribal Government,	57
Santál Customs, Religion, and History,	58-60
The Kandhs, Tribal Government Wars, and Blood Revenge,	60, 61
Kandh Marriage by Capture, Human Sacrifice,	61, 62
The Three Non Aryan Stocks-Tibeto-Burmans, Dravidians,	
and Kolanans, their Languages,	63-69
Statistics of Non Aryan Races in 1872 and 1881,	60~71

TABLE OF CONTENTS	x
	PAGE
Crushed Tribes, Gipsy Clans, Predatory Tribes,	71, 72
Character of the Non Aryan Tribes,	72, 73
Mhairs and Bhils, their Reclamation by good Government,	73 74
CHAPTER IV	
THE ARYANS IN ANCIENT INDIA.	
The Indo-European Stock	75
Its Early Camping ground in Central Asia,	75, 76
Common Origin of European and Indian Religions	76
The Indo-Aryans on the March, and in their new Homes	76, 77
The Rig Veda, Widow burning unknown,	77, 78
Development of Caste, 78, 87, 88, 89, 90, 91,	
Aryan Civilisation in the Veda	79-86
The Aryan Tribes organized into Kingdoms,	87
Origin and Growth of Priestly Families	87 88
The Four Vedas Bráhmanas Sútras,	88 89
The Warrior and Cultivating Castes	8g go
The Four Castes formed,	90 91
Struggle between the Brahmans and Kshattriyas,	92-94
Bráhman Supremacy established, Brahman Ideal Life	94-97
Bráhman Theology	97
Rise of the Post Vedic Gods, the Hindu Triad,	97, 98
Brahman Philosophy its Six Schools,	98, 99
Brahman Science and Grammar, Panini	100 101
Sanskrit was and Prákrit Dialects,	101-104
The Indian Alphabets,	102, 103
Brahman Astronomy ats Three Periods,	104-106
Brahman Mathematics, Medicine and Surgery	106-110
Hindu Art of War,	110
Indian Music, its Peculiarities and Modern Revival	110-112
Indian Architecture, Art work and Painting	112, 113
Bráhman Law, Codes of Manu and Yajnavalkya,	113-115
Hindu Customary Law Penils of Codification,	116-118
Secular Literature of the Hindus,	218
The Wahdbharata its Growth and Central Story,	119-122
The Polyandry of Draupadi,	121, 122
The Randyana its Story and its Author, Valmiki	122, 124
Later Sanskrit Fpics,	124, 125

ali	TABLE OF CONTENTS.			
4.0				(GE
The Hindu Drama	•		125-	_
The Hindu Novel,			127,	_
Sanskrit Lyric Poets	ry, Jayadeva,		-	128
Mediæval Theology	, the Puránas,	128-130,		
The Six Attacks on	Bráhmanism,		130,	131
	CHAPTER V			
в	UDDHISM (543 BC TO 1000 A.I	<b>)</b>		
Buddha's Story mod	lelled on the Sanskrit Epic,			132
	al Development of the Heroic A	rvan Man	133	_
	, Early Life, and Great Renunc		133,	
_	mptation, and Teachings,	,	134,	-
His Later Years and			136	_
	Southern Buddhist Schools		•	138
	ddha, his Opponents, Devadai	ta,	139	140
	a Karma Air ana,		141,	
Moral Code of Bud	dha its Missionary Aspects,			143
	ent of Buddhism, the Four Cou	ncils, 143,	144	1 17
-	, his Council and Edicts,		144-	
The Work of Kanis				147
The Northern and S	Southern Buddhist Canons,		147-	149
Spread of Buddhism	throughout Asia		149	150
Buddhist Influences	_			150
Buddha as a Christi	an Saint,		151,	152
Buddha's Personality	denied,			153
Buddhism did not o	oust Brahmanism		154,	155
The Chinese Buddh	nst Pilgrims, Fa Hian and Hine	en Tsiang	155,	156
Buddhism under Sil	áditya, Monastery of Nalanda,		156	157
Mingling of Buddhi	sm and Bráhmanism			157
Buddhism an Exiled	Religion, its Foreign Conque	sts,		158
Buddhist Survivals i	n India,		157-	162
The Jams, their Re	lation to the Buddhists,		157-	162
	CHAPTER VI			
THE (	FREEKS IN INDIA (327 TO 161	BC)		
Early Greek Writers	, Hekataios, Sirabo, Pliny, and	Arman		163
	Results of his Invasion,		164-	_
			TA 1	# UU

# TABLE OF CONTENTS PAGE PAGE 166, 169 The India of Megasthenes, Indo-Greek Treaty, Later Greeks, Greek Survivals in Indian Art, Ancient and Modern Greeks, the Yavanas, 172, 173

#### CHAPTER VIL

# SCYTHIC INROADS INTO INDIA (126? B.C. TO 544 A.D.)

Early Scythic Migrations towards India, Tue Chi Settlements,	174, 175
Pre Buddhistic Scythic Influences, the Horse Sacrifice,	175, 176
Was Buddha a Scythian? Tibetan Traditions	176-178
Scythic Buddhism and Settlements in India,	178, 179
Scythian Elements in India the Játs and Rajputs (?),	179 180
Indian Struggle against the Scythians	180-182
Indo-Scythic Settlements, Sen Gupta, and Valabhi Dynasties,	181, 182
Pre-Aryan Kingdoms in Northern India,	183, 184
The Takshaks and Nagás,	184-186
Ghakkars Bhars, Bhils Kochs Ahams, Gonds etc.,	186-189
Scythic and Nága Influences on Hinduism	189, 190

## CH \PTER VIII

# RISE OF HINDLISM (750 TO 1520 LD)

Decay and Persecution (?) of Buddhism	191, 192
Twofold Basis of Handuism-Caste and Religion,	192
Caste founded on 'Race, Occupation, and Locality	192, 193
The Brahman Caste analysed	193, 194
Building up of Caste Hindu Marriage Law	194 195
Changes of 'Occupation by Castus	196, 197
Plasticity and Rigidity of Caste	197
Caste a System of Trade Guilds an Indian Strike	197, 198
Practical Working of Caste, no Poor Law Rewards and	
Punishments,	198-200
Religious Basis of Hinduism	200, 201
Buddhist Influences, Beast Hospitals, Monasteries,	201, 202
A Japanese Temple and a Christian Church,	202, 203

	PAGE
Shrines common to Different Faiths,	203
Serpent-Worship, Nága Rites, Phallic Emblems,	204
Fetish-Worship in Hinduism, the Sálagrám,	205, 206
Bráhman Founders of Hinduism, Low-Caste Apostles,	207
The Acta Sanctorum of Hinduism, the Bhakta-Mala,	208
Kumárıla Bhatta, Sankara Acharya,	209
Growth of Siva-Worship, its Twofold Aspects,	210-212
Human Offerings, the Charak Puji,	212, 213
The Thirteen Swaite Sects, their Gradations,	213, 214
Siva and Vishnu compared,	215
Friendly Vishnu, the Vishnu Purána,	215, 216
Bráhmanical and Popular Vishnuism,	217
Vishnuite Founders, Rámánuja, Ramanand,	217, 218
Kabir, Chaitanya, Vallabha Swámi,	218-222
Krishna-Worship, the Chief Vishnuite Sects,	222, 223
The Brahmanical and Buddhist Origin of Jagunnáth,	224
Christian Calumnies aguinst Jagannáth,	224-226
Modern Fate of the Hindu Triad,	227, 228

## CHAPTER IX

# CHRISTIANITY IN INDIA (CIRCA 100 FO 1881 VD)

Christianity coeval with Buddhism for 900 years	:	229
Origin of Christianity in India,		229
The Three Legends of St Thomas	230-	239
St. Thomas the Apostle, Thomas the Manicha in, Thomas the		
Armenian,	231,	232
Wide Meaning of 'India' in the Fathers,		233
Early Indian Christians (190 A D),	234	235
The Nestorian Church in Asia, its Wide Diffusion,	235,	236
'Thomas Christians' of Persia and of India,		237
Mixed Worship at the alleged Shrinc of 5t Thomas near		
Madras,		238
Troubles of the Ancient Indian Church		240
Extinction of the Nestorian Church, 241	, 242,	2 13
First Portuguese Missionaries, 1500 AD, the Syrian Rite,	243-	-245
Xavier and the Jesuits, Work done by,	244	245
Jesuit Literature in India, 246	, 250,	253

Mughal Mcrcenaries for the Suppression of Hindu Revolts,

Lypeditions and Cruelties,

him,

House of Tughlak (1320-1414 AD), Muhammad Tughlak's

His Forced Currency, Revenue I vactions, and Revolts against

282, 283

283, 284

283

	* Lat. 14
Firuz Sháh Tughlak's Canals (1351–1388 A.D ),	285
Timur (Tamerlane), 1398 A.D., Sayyıd and Lodi Dynastics	, 285, 286
Hindu Kingdoms of the Deccan, Vijayanagar, 2	86, 287, 288
Five Muhammadan States of the Deccan, Bahmani Kings,	287, 288
Independent Náyaks and Pálegars of Southern India,	288
State of India on the Eve of the Mughal Conquest,	288, 289
CHAPTER XI	
THE MIGHAL EMPIRE (1526 TO 1761 AD)	
Babars Early Life, his Invasion of India, Battle of Pinip	at
(1526),	290
Humayun Sher Shah the Afghan,	290 291
Akbar the Great his Work in India (1560-1605).	291-297
His Conciliation of the Hindus Intermarringes,	293
Akbar's Hindu Military and Revenue Officers	293
Reform of Hindu Customs, Change of Capital to Agia	293, 204
Akbar's Subjugation of Khandesh his Death,	274 295
Akbar's Religious Principles, his New Faith	295, 296
Akbar's Organization of the Empire, Military and Judici	પી
Reforms	290
Albar's Financial System, Table of his Revenues	296-298
Revenues of the Mughal Empire (1593-1761),	299, 300
Jahangir, Emperor (1605-1627), the Empress Nur Jahan	,00 301
Sir Thomas Roe, Ambassador, Drinking Bouts at Court,	301 302
Jahangir's Personal Character his Justice and Religion,	302
Sháh Jahan Emperor (1628-1658), his Deccan Conquests	302-304
Shah Jahan's Architectural Works, Taj Mahal and Mot	Į
Masjid	304
The Great Mosque and Imperial Palace at Delhi,	304
Rebellion of Prince Aurangeeb, and Deposition of Shah	
Jahán,	305
Provinces and Revenues under Shah Jahan,	305
Aurangach, Emperor (1658-1707),	306-312
Murder of his Brothers,	307
Conquests in Southern India, Rise of the Marath is,	307, 308
Aurangzeb's twenty years' Maratha War, his Despair and	
Death,	308, 309
Auranguels S Oppression of Hindus, Rajput Revolts,	309, 310

TABLE OF CONTENTS	
Auman markin Durannan and Danama	PAGE
Aurangzeb's Provinces and Revenues,	310, 311
Character of Aurangzeb,	312
Six Puppet Successors of Aurangzeb,	313
Decline and Fall of the Mughal Empire (1707-1858),	312, 313
Independence of the Deccan, Oudh, and Rájput States,	314
Invasions of Nadir Shah the Persian, and Ahmad Shah the	
Afghán (1739–1761), Last Battle of Pánipat (1761) and Fall of the Mughal	314, 315
Empire, .	257 226
Emphe,	315, 316
CHAPTER XII	
ihi maratha power (1634 to 1818 ad)	
India won, not from the Mughals but from the Hindus	317
Rise of the Mirathis Shahji Bhonsla (1634)	317
The Hindu Pirty in Southern India	317, 318
Siv 131 the (1re it (1/27–1680)	318, 319
His Guerilla Wutar with the Mughals,	319
Simbhin (1080–1689) Sihu (1707),	319, 320
Rise of the Peshwis Balan Viswanath,	320
Growth of the Maritha Confederacy	320
Mirithi Ruds to Decem Bengil and the Punjib Chauth,	320 321
Deteat of the Marathas at Pumpat (1761)	321
The Live Great Maratha Houses, Decline of the Pesawas,	321-323
British Wire with the Mirathas (1779-1781 1803-1804 and	
1817-1818)	323-324
CHAPTER XIII	
THE INDIAN VERNACULARS AND THEIR LIFERATURE	
The Three Stages in Indian History	325, 326
The Dravidian Route through India,	327
The Drividian Family of Languages ats Place in Philology,	327, 328
Pre Aiy in Dravidian Civilisation	328
Bi thm inic Influence on the Drividians	329
Dravidian Linguages Tamil	330-333
Aryan Languages of Northern Indo Sunskit,	334 335 0

VOL. VI

XVIII	TABLE	OF CONTE	VTS		
					PAGF
	s or Ancient Aryai				<b>336-</b> 338
	ern Vernaculars	evolved from	the	Ancient	
Prákrits	•				338
	rákrit, and Non	Aryan Elemen	nts in	Modern	
Vernaci	•				339-342
	Modern Vernaculı				342-344
	Nernaculars the				343-355
	istorical Developn				345, 346
	Historical Develop				346
Bengalí, its l	Historical Develop	ment and Chief	Autho	)r<	346-351
	СНА	PIER XIV			
EARL\ EU	ROPEAN SFIILIN	LN75 (1498 TO	18111	CFNILRY	in)
Vasco da Ga	mas Expedition (	1408),			356-355
Portuguese '	Vovance and Sup	remacy in the	. I ast	Albu	
querque	and his Successor	``			357-360
Downfall of t	the Portuguese th	icir Posses ions	m 188	1	361
The Dutch in	1 India (1602–182	4),			361 362
	r Progress, but Sh				362
	utch Power Dute		11		362, 36,
	Adventurers (149	16-1596)			303, 364
-	India Companies,				364, 365
_	Volages (1602-1				365, 366
Naval Fights	nith the Portugue	se Swallt (161	51		366, 367
	Ditch, Massicr				367 364
	Factories Sur i				368 369
Madras Found	ded (1639) Bom	bay Ceded (166	1		369 370
Calcutta Four					371
Other Euroje	an I ist India Coi	npanies			371-377
	СНА	PILR XV			
•	HISTORY OF BRILL		10.15	.85)	
			,., ,.	31	-
	erritorial Possessi				378
	nglish Wars in the		plex (	dive,	378-380
The Inchish is	n Bungal (1624-16	1061			280

#### TABLE OF CONTENTS

THERE OF CONTENTS	xix
Native Rulers of Bengal (1707-1756), the 'Black Hole'	PAGT
Tragedy,	380, 381
Battle of Plassey (1757), and its Results,	381-383
Clive, Governor of Bengal (1758), I ist of Governors and	301-303
Viceroys,	384
Clive's Wars in Oudh, Madras, and Bengal,	385 385
Massacre of Patna, First Sepoy Mutiny, Battle of Bahar	3°5 386
The Grant of the Diwani (1765),	387
Clive's Reorganization of the Company's Service (1766	387 387
Administration of Warren Hastings (1772-1785),	387-392
Abolition of the Dual System of Administration (1772	388
Hastings' Policy towards Native Powers,	388-390
Rohillá, Maráthá, and Mysore Wars,	
Charges against Hastings, his poor Excuse,	390-392
Lord Cornwallis (1786–1793) the Permanent Settlement	391
Second Mysore War	392, 393
Marquis of Wellesley (1798–1805) his Work in India	394-398
Treaty with the Nizim and Fatinction of French Influence	395 396
Third Mysore Wir, and Fall of Seringapatam (1790),	395, 397
Second Marith W 1 (1802-1805) and Extension of British	37-1371
Territory	397, 39 <sup>9</sup>
Sir George Barlow (1805) the Vellore Sepov Mutany	399
Earl of Minto (1807-1813) Imbasses to Persia and	3//
Afgh mistan,	399, 400
Marquis of Hastings (1814-1823)	100-103
The Nepal, Pindin and last Marithi Wi	401 402
Lord \mherst (1823-1828),	403 404
First Burmese War Capture of Bhartpu	401
* *** * * * * * * * * * * * * * * * * *	404-400
	404, 405
7	405 400
Lord Metcalfe (1835-1836) Taberty of the Press	406
Lord \uckland (1836-1842)	406, 408
The First Afghan War (18,9-1841) ats Disastrous Termina-	
tion,	408
Lord Ellenborough (1842-1844),	408-410
The Army of Retribution, 'Crites of Somnah	408, 409
	409, 410

TA	BLE	nr	car	VTR	NTS

								PAGE
Police and Jail								472
Education, .								472-479
Education in		India;	Sans	skrit	Tols	and	Village	
Schools,								472, 473
Early English		the Ca	alcutta	. Ma	adrasa	and	i other	
Colleges,								473
Mission School								473
State System of	f Education	on in In	dıa,					473, 474
Education Con								474
Education Stati								474, 475
Indian Univers	ities, Coll	eges, an	d Sch	iool-,				475-477
Primary Schoo	ls, Girls'	Schools	, Nor	mal	and o	ther	Special	
Schools,								477-479
The Vernacular	Press; 1	Newspap	ers ar	nd Bo	ooks,			480-481
	_							
	С	HAP	TER	. X	VII.			
	AGRI	CULTUR	FANI	D PR	ODUCI	s.		
Agriculture alm	ost the S	ole Occi	matio	n of	the P	eople		482, 483
Various System								483
Rice in the diff								484-486
Wheat; Millets								486-490
Fruits; Spices;								490, 491
Cotton Cultivat						ts.		491-494
Jute Cultivation								494, 495
Indigo Cultivat								495, 496
Exports of Indi					:			497, 498
Opium Cultivat								498, 499
Tobacco Cultiv								499, 500
Table of Crop						-		501
Coffee; its Inti								
Tea in India;								504-507
Processes of Te						•		508, 509
Cinchona Culti						· ·s of		509-511
The Company's				٠, ٥				511, 512
Silk Area of Be				•	•	•		512, 512
Jungle Silk; La						•		513-515
innific ank! Te	ic, iac-u	у <del>с</del> , .	•	•	•	•		2.2-2.2

		-				
Model Farms; the Problem of improved Hu	shand	i.			PA	GE
The Impediments to better Husbandry	эраш	шу,		• :	515-5	,17
The Impediments to better Husbandry, Agricultural Stock of India,	•	•	•	•	517-	,19
Breeds of Cattle; Horse-Fairs; Studs; Wild	I Fle	ohante	,			
The Forest Department,						
Wanton Destruction of Forests; Indian Tim	her T	· 'rooc	. 5		3*4-:	)20 -26
Forest Conservancy; its Results, Nomadic Tillage; its Destructiveness, .				•	520, ; 527, ;	527 8
,					521, 528,	
Irrigation; its Function in India, Irrigated Area in Sind; Bombay; Punjab,	•	•				
In the NW. Provinces; Oudh; Bengal; O	*	•		•	529-	534
In the Mw. Frovinces; Outin; Bengar; O	rissa,	•	•			
In Madras; Mysore; Central Provinces,	•	•	•	•	535-	537
Statistics of Cultivation and Irrigation, . Famines; their Causes; Drought; Flood; Necessity for husbanding and utilizing the Victorian forming.	D1:b.	. 11:-		•		530
Managing for hughending and utilizing the W	bugu	Cumul	т,	٠	539	540
Necessity for nusbanding and utilizing the v	vater-	Suppi	у,	•	540,	541
ristory of previous ramines (1709 to 1870)	,	•		•	5 11,	542
The Famine of 1876-1878; its Area, .						
Remedial Efforts; Mortality; Expenditure,		•			542-	-
Famine, a Weak Check on Population,	•	•	•	•		544
CHAPTER XV	III.					
MEANS OF COMMUNICA	TION					
Indian Railway System; Lord Dalhousie's T	runk	Line	S,			545
						545
The Four Classes of Indian Railways, .						546
'Guaranteed' Railways,						
'State Railways,'					547,	
'Assisted' and 'Native State' Railways,					548,	
Railway Statistics,					549,	
Roads; Old Military Routes,						550
The Grand Trunk Road; Bombay Inland B						550
Extension of Roads; Bridges of Boats,						551
Navigable Rivers,						
Navigable Canals : Malabar Back-waters, etc						

TABLE OF CONTENTS.

#### CHAPTER XIX

#### COMMERCE AND TRADE

Contamageous acres accessed	PAGE
Ancient, Mediæval, and Modern Trade of India,	555, 556
Large Sea borne Trade impossible under the Mughals,	556
Growth of Trading and Industrial Cities under British Rule,	556-558
Rise of Calcutta and Bombay,	557
Summary of Indian Exports (1700-1885),	558
India's Balance of Irade and Yearly Savings,	558, 559
Fourfold Division of Modern Indian Trade	559
The Sea borne Trade of India,	559, 560
Early Portuguese Trade (1500-1600)	560
Dutch Monopoly (1600),	560
English Factories and Eurly Trade (1600-1700),	560, 561
Growth of Irade Quinquennial Table of Loreign Irade,	561, 562
Indian Foreign Trade Statistics, Imports and I sports	563-581
Imports, Cotton Goods Treasure, 565 566	565, 569
Exports Raw Cotton, Jute, Rice When,	569-572
Exports Oil-seeds Indigo and Dies, Ten Coffee	573-575
Export of Cotton and Jute Manufactures,	575 576
Countries with which India trades, England	577
China, Straits, Ceylon Muritius France, Italy	577, 578
United States Australia,	578
Distribution of Loreign Trade of India,	579, 580
Effects of the Sucz Canal on Indian Irade,	58 r
Sir R Temple on the Balance of India's Forcian Irade,	581-583
Coasting Frade of India, Shipping Statistics,	584-586
Frontier Trade with Mghanistán and Genti il Asia,	586, 587
The Himalayan Trade Routes, \cp4l, Libet,	587 588
Trade with Bhutan and the North I astern I rontier,	588
Trade with Independent Burma and Siain,	588, 589
Tables of Trans Frontier Lindward Irade,	589, 590
Internal Trade, Irading Castes,	591, 592
Local Trade, the Village Money lender,	592
Religious I airs, Village Markets,	593
Internal Trade a Safeguard against Famine,	593, 594
Statistics of Internal Trade in certain Provinces	594, 595
Growth of Large Marts Local Trading Centres.	505-502

#### CHAPTER XX

#### ARTS AND MANUFACTURES

	PACE
Manufactures of India, Art-work,	598
Competition with the English Artisan,	598
Native Industries, Village Crafts,	599
Cotton weaving, its Decline,	599, 600
But still a Domestic Industry throughout India,	600, 601
Special Fabrics, Muslins, Chintzes, Saris,	601, 602
Silk-weaving, Classes of Silk Fabrics,	602, 603
Steam Silk Factories,	603
Enibroidery, Kashmir Shawls, Leather work,	603
Carpets and Rugs, Processes of Manufacture,	604, 605
Goldsmiths and Jewellers' Work, Precious Stones,	605, 606
Iron-work, Cutlery, Chain Armour, Damascening	606, 607
Brass and Copper Work, Bidari Ware	607, 608
Indian Potters and Sculpture,	608, 609
Wood-carving, Inlaying, Ivory-carving	609
Furope in Industries, Steam Cotton Muls	610-612
Their Manufactures Competition with Manchester,	611, 612
Statistics of Bombry Cotton Mills, their Future Prospects, 610	611,613
Jute Mills, Manufacture of Gunny,	614, 615
Lyports of Jute, Indian Consumption Growth of the	:
I rade,	615, 616
Brewing, Paper making, Leather, e.c.	616, 617

#### CHAPIER XXI

#### MINLS AND MINERALS

Indian Iron, Native System of Working	618
Failure of Early English Efforts,	618, 619
Difficulties of Iron sincling in India,	619
Indian Coal, its Inferior Quality,	619
History of Coal mining in Bengal,	619-621
The Four Great Coal Fields, Future of Indian Coal	622
Salt Manufacture, the Punjab Salt Range,	622, 623

#### TABLE OF CONTENTS

XXZY

	PAGE
Saltpetre, Manufacture and Export of,	623, 624
Gold and Gold-mining, the Wainad Quartz Reefs,	624, 625
Copper, Lead, Tin, Antimony, Cobilt,	625, 626
Petroleum and Mineral Oils,	626, 627
Stone, Lime, Kankar Murble, Slate,	627, 628
Diamonds, Carnelians, Pearl Fisheries	028, 629

#### CHAPIER XXII

#### GLOLOGY

Geology, the Himalwar Region	( 31, 632
The Lower Himalayas Siwáliks Salt Range,	0,2,633
Indo Gangetic Plain its Geological Ase and History,	033, 634
Peninsular India, Vindhyan Rocks	11,4,635
Gondwana Panchet Talcher, and Damodar Series	435, 636
Ine Rang nj Coal Seums,	637
Decean Imp Laterite,	638 639
Geology of Burma,	639 640

#### CHAPILR XXIII

#### MITHOROLOGY

641 642
642
042, 643
043, 644
644
644
044, 645
046, 647
046, 647
647 648
649, 650
650, 651

#### CHAPTER XXIV

#### ZOOLOGY AND BOTANY

	PAGE
Mammals of India, Lion, Tiger, Leopard,	652, 653
Wolf, Fox, Jackal, Dog, Hyena,	654, 655
Bear, Elephant, Rhinoceros, Wild Hog,	>55-657
Sheep and Goats, Antelopes, Nilgai, Deer,	657, 658
Bison and Buffalo,	658
Ornithology, Birds of Prevand Game Birds,	659
Reptiles, Loss of Life from Snake-bite, the 'Cobra,	660
I ishes, Insects, I ocusts,	66 r
Indian I lora in Virious Provinces,	662 <b>–66</b> 4

#### CHAPTER XXV

#### VITAL STATISTICS

Sources of Health Returns their Untrus worthiness	665, 666
Death-rate in India, Average Duration of Life,	666, 667
Vital Statistics in different Provinces,	667-675
Tables of Birth and Death Rates	076-679
Health of the European Army Causes of Mortaity	75 680-682
Health of the Native Army Causes of Mortal tv,	682-684
Health Statistics of the Ind Population	684, 685

## APPENDICES

APPENT	oix I	Area, Fowns and Villages, Houses, Population,	PAGE
		etc, of British India in 1881,	689
,	11	Fowns and Villages of British India, classified	
		according to Population,	690
	III	Cultivated, Cultivable, and Uncultivable Area,	
		Land Revenue, etc., in Provinces for which	
		Returns exist,	691
	II	Population of British India, classified according	
		to Sex and Age	692
	1	Population of British India classified according	
		to Religion,	693
	VI	Asiatic Non Indian Population of British India	
		classified according to Birthplace	694
	/ II	Non Asiatic Population of British India classified	
		according to Birthplace,	695
	1111	List of 149 Lowns in British India of which	
		•	697
	17	Population of British India, classified according	
			-702
,	X	Population of British India, classified according	
		to Ciste, Sect. and Nationality,	703
Index,		705-	-747

### VOWEL SOUNDS

8	has the sound of a as in	rural.
á	has the sound of a as in	far
ę	has the yowel sound in	grey
1	has the sound of as in	police
f	has the vowel sound in	pier
a	has the sound of o as in	bone
u	has the sound of was in	bull
ú	has the sound of u as in	sure.
31	has the vowel sound in	lyre.

Accents have been used as sparingly as possible, and omitted in such words or terminals as fur where the Sanskitt family of alphabets takes the short vowel instead of the long Persian one. The accents over f and k have often been omitted to avoid confusing the ordinary English reader when the collocation of letters naturally gives them a long or open sound. No attempt has been made by the use of dotted consonants to distinguish between the dental and lingual d, or to represent similar refinements of Indian pronunciation

Where the double 60 is used for u or the double 66 for t, and whenever the above wowel sounds are departed from, the reason is either that the place has obtained a popular fixity of spelling or that the Government has ordered the adoption of some special form

I have borne in mind four things—First, that this work is intended for the ordinary English reader. Second, that the twenty-six characters of the English alphabet cannot possibly be made to represent the fifty letters or, signs of the Indian alphabets, unless we resort to puzzling un English devices of typography, such as dots under the consonants, curves above them, or italic letters in the middle of words. Third, that as such devices are unsuitable in a work of general reference, some compromise or sacrifice of scholarly accuracy to popular convenience becomes inevitable. Fourth, that a compromise to be defensible must be successful, and that the spelling of Indian places, while adhering to the Sanskrit vowel sounds, should be as little embarrassing as possible to the European eye.

# IMPERIAL GAZETTEER

OF

# INDIA.

VOLUME VI

# INDIA

#### CHAPTER I --- PHYSICAL ASPECTS

ENDIA forms a great irregular triangle, stretching southwards from Mid Asia into the sea Its northern base rests upon the Himalayan ranges, the chief part of its western side is washed by the Arabian Sea, and the chief part of its eastern side by the Bay of Bengal It extends from the eighth to the tharty fifth degree of north latitude, that is to say, from the hottest regions of the equator to far within the temperate zone The capital, Calcutta, hes in \$81 E. long., so that when the sun sets at six o'clock there, it is just past mid-day in England. The length of India from north to south and its greatest breadth from east to west, are both about 1900 miles, but the triangle tapers with a pear shaped curve to a point at Cape Comerus, its southern extremity To this compact dominion the English have added, under the name of British Burma, the strip of country on the eastern shore of the Bay of Bengal The whole territory thus described contains close on 11 millions of equare miles, and over 256 milhons of inhabitants India, perefore, has an area and a population about equal to the east and population of the whole of Europe, less Russia. Its copie more than double Gibbon's estimate of 120 millions for the pases and nations which obeyed Imperial Rome,

This past Ametic pennsula has, from a very ancient penody in known to the external world by one form or other of the

name which it still bears. The early Indiaus did not themselves recognise any single designation for their numerous and diverse races, their nearest approach to a common appellation for India being Bharata-varsha, the land of the Bharatas, a noble warrior tribe which came from the north. But this term, although afterwards generalized, applied only to the basins of the Indus and the Ganges, and strictly speaking to only a part of them. The Indus river formed the first great landmark of nature which arrested the march of the peoples of Central Asia as they descended upon the plans of the Punjab. That mights river impressed itself on the imagination of the ancient world. To the early comers from the high lying camping grounds of inner Asia, it seemed a vast expanse of waters.

They called it in Sanskrit by the word which they give to the ocean itself, Sindhus (from the root stand, 'to flow') a name afterwards applied to the ocean god (Varuna). The term extended itself to the country around the river, and in its plural form Sindharas, to the inhabitants thereof. The ancient Persians softening the initial sibilint to an aspirate, called it Herdu in the Zend language, the Greeks again softening the initial by omitting the ispirate altogether derived from it their Incikos and Indes. These forms closely correspond to the ancient Persian word Idhus which is used in the insert, tions of Darias for the dwellers on the Indus. But the native Indian form (Sindhus) was known to the Greeks, as is proved by the Sinthes of the Periplus Mar's I rythiaer and by the distinct statement of Pliny, 'Indus incoles Sindus appellates. Virgil says 'India mitt't clur'

The eastern nations of Asia like the western races of Furone, derived their name for India from the great river of he Pun, do The Buddhist filgrims from China, during the first seven centuries of our era, usually travelled landward to Hindustan, skirting round the Hundings and entering the holy land of their faith by the north western frontier of India One of the most celebrated of these pour travellers. Hiven I stang (629-645 AD), states that India was anciently called Shiri tu, ilso Hien thu, but now according to the right pronunctation at is called In tu? This word in Chinese means the moon, and the cradle land of Buddlusm derived its name. a cording to the good pilgrim, from its superior clory in the pritual firmament, sout luna inter minora sidera there he torches by night and the shining of the stars, he says, "low different from the bright (cool) moon! Just so the bright connected light of holy men and sages, guiding the and as the shiring of the moon, have made this country

eminent, and so it is called In tu' Notwithstanding the pious philology of the pilgrim, the great river of the Punjab is, of course, the origin of the Chinese name

The term Hindustan is derived from the modern Persian form (Hind), and properly applies only to the Punjab and the central basin of the Ganges It is reproduced, however with a wider signification in the title of the Queen-Empress, Kaisar-i-1 Hind, the Cæsar, Kaiser, Czar, or Sovereign-paramount of India

India is shut off from the rest of Asia on the north by a I vast mountainous region, known in the aggregate as the d Among their southern ranges lie the Independent States of Bhutan and Nepál the great table land of Tibet o stretches northward behind the Native Principality of Kashmir n occupies their western corner At this north-western angle of a India (in lat 36 x, long 75° E), an allied mountain system 1 branches southwards Its lofty offshoots separate India on the c west, by the well marked ranges of the Safed Koh and the Sulai mán from Afghanistan, and by a southern continuation of lower hills (the Halas, etc.) from Baluchistan The southernmost part of the western land frontier of India is the river Hab, and the boundary ends with Cape Monze, at the mouth of its estuars, in lat. 24° 50' N, long 66° 43 E Still proceeding southwards, India is bounded along the west and south west by the Arabian See and Indian Ocean. Turning northwards from its southern extremity at Cape Comora (lat & 4 20 N, long 77° 35' 35' E) C the Bay of Bengal forms the main part of its eastern boundary

But in the north east as in the north west, India has again a land frontier. The Himalayan ranges at their north eastern angle (in about lat 28 ×, long 97° L) throw off long spurs and chains to the southward. These spars separate the British Provinces of Assum and Fastern Bengal from Independent Burma. They are known successively as the Abar, Naga, Patkoi, and Birel ringes. Jurning almost due south in lat 25°, they culminate in the Blue Mourtain, 7100 feet, in lat 22° 37′ N, long 93° 10′ F. and then stretch southwards under the name of the Arakan Yomas, separating British Burma from Independent Burma, until they again rise into the great mountain of Myin matin (4700 feet) in 193 degrees of north latitude. Up to this point the eastern hill frontier runs in a southerly direction, and follows, generally speaking the watershed which divides the river systems of Bengal and

<sup>&</sup>lt;sup>1</sup> Styn kt Buddhist Records of the Western World translated from the Chinese of Hinen Tstan<sub>6</sub> by Samuel Beal Vol 1 p 69 Trubner 1884

British Burma (namely, the Brahmaputra, Meghná, Kuladan, etc.) from the Irawadi basin in Independent Burma. But from near the base of the Myin-matin Mountain, the British frontier stretches almost due east in a geographical line, which divides the lower Districts and delta of the Irawadi in British Burma, from the middle and upper Districts of that river in Independent Burma. Proceeding south-eastwards from the delta of the Irawadi a confused succession of little explored ranges separates the British Province of Tenasserim from the Native Kingdom of Siam. The boundary line runs down to Point Victoria at the extremity of Tenasserim (lit 9° 59 ×, long 98° 32′ E) following the direction of the watershed between the rivers of the British territory on the west and of Siam on the east

The Empire included within these boundaries is rich in varieties of scenery and climate from the highest mountains in the world to vast river deltas raised only a few inches above the level of the sea. It forms a continent rather than a country But if we could look down on the whole from a balloon, we should find that India consists of three separate and well-defined The first includes the lofty Hundrya Mountains which shut it out from the rest of Asia, and which although for the mos, part beyond the British frontier form a most important factor in the physical geography of Northern India. The second region stretches southwards from the base of the Himalayas and comprises the plains of the great rivers which issue from them. The third region slopes upward again from the southern edge of the river plains, and consists of a high three sided table-land, buttressed by the Vindhya Mountains on the north, and by the Eastern and Western Chais which run down the coast on either side of India till they meet it a point near Cape The interior three sided table land, thus enclosed, is dotted with peaks and ranges broken by river villeys and interspersed by broad level uplands. It comprises the southern half of the beninsula

The first of the three regions is the Hamaliya Mountains and their offshoots to the southward. The Hamaliy is—literally, the 'Abode of Snow,' from the Sanskrit hima, frost (Latin, hiems, winter), and alaya, a house-consist of a system of stupendous ranges, the loftiest in the world. They are the Emodus or Imaus of the Greek geographers, and extend in the shape of a seimitar, with its edge facing southwards, for a distance of 1500 miles along the northern frontier of India. At the north eistern angle of that frontier, the Dihang river,

the connecting link between the Tsan-pu (Sangpu) of Tibet and the Brahmaputra of Assam, bursts through the main axis of the Himálayas At the opposite or north western angle. the Indus in like manner pierces the Himálayas, and turns southwards on its course through the Punjab The Himalayas. like the Kuen luen chain, the Tián-shan, and the Hindu Kush, converge towards the Pamir table-land—that central knot whence the great mountain systems of Asia radiate With the Kuen luen the Himálayas have a closer connection, as these two mighty ranges form respectively the northern and southern buttresses of the lofty Tibetan plateau. The Himalayas project east and west beyond the Indian frontier Their total length is about 1750 miles, and their breadth from north to south from 150 to 250 miles 1

Regarded merely as a natural frontier separating India The from the Tibetan plateau, the Himalayas may be described as double a double mountain wall running nearly east and west, with a Wall and trough or series of deep valleys beyond. The southernmost Trough of the two walls rises steeply from the plains of India to beyon! 20,000 feet, or nearly 4 miles, in height It culminates in Kanchanian, 28 176 feet, and Mount Everest, 29,002 feet, the latter being the loftiest measured peak in the world This outer or southern wall of the Himalayas subsides on the northward into a series of dips or uplands, reported to be 13,000 feet above the level of the sea, beyond which rises the second or inner range of Himalayan peaks. The double Himalayan wall thus formed, then descends into a great trough or line of valleys, in which the Sutlei, the Indus, and the mighty 1-an-pu (Sangpu) gether their waters

The Sutley and the Indus flow westwards, and pierce through the Western Himilayas by separate passes into the Punjab The Isan pu, after a long unexplored course eastwards along the valley of the same name in Libet, finds its way through the Dihang gorge of the Listern Himalayas into Assam, where it takes its final name of the Brahmaputra. On the north of the river trough, beyond the double Himalayan wall, rise the Karakoram and Gugri mountains, which form the immediate escarpment of the Liberan table land. Behind the Gangris, on the north, the lake-studded plateau of libet spreads itself out at a height averaging 15 000 feet. Broadly speaking, the double Himilian wall rests upon the low-lying plains of

<sup>&</sup>lt;sup>1</sup> Some geographers hold that the Himalian sy tem stretches in a continuous chain westwards along the Oxus to 68 F long and that only in arbitrary line can be drawn between the Himaliy in ranges and the elevated regions of Tibet to the north of them

Ghází Khán, and the famous Bolan Pass (5800 feet at top), still farther south, furnish the gateways between India and The Hála, Brahui, and Pab mountains form Afghanistán the southern hilly offshoots between India and Baluchistán, but they have a much less elevation than the Safed Koh or the Suláimán

The Himalayas, while thus standing as a rampart and strong Himalayan defence around the northern frontier of India, collect and store water up water for the tropical plains below. Throughout the summer, vast quantities of water are exhaled from the Indian Ocean I his moisture gathers into vapour, and is borne northward by the monsoon or regular wind, which sets in from the south in the month of June The monsoon carries the waterladen clouds northwards across India, and thus produces the 'runy season, on which agriculture so critically depends But large quantities of the moisture do not condense or fall as rain in passing over the hot plains. This vast residue is eventually dished against the Himalayas Their lotty double walls stop its farther progress northwards, and it either descends in rain on their outer slopes, or is trozen into snow in its attempt to cross their inner heights. Very little gets beyond them, so that while the southern sours of the Himalayas receive the Himalaya largest measured rainfall in the world and pour it down to rainfall the Indian livers the great potential of libet on the north of the double Hima wan will gets sourcely any rainfall

At Cherra-Pan,, where the monsoon first strikes the hills in Assain, 489 inches of run, according to returns for 25 years ending 1881, tail unually. In one year (1861) as many is 805 inches were reported of which 366 inches fell in the single month of July While, therefore, the yearly runful in I ondon is about 2 feet, and that of the plans of India from 1 to 6 feet the runtul at Cherry Punji is 40 feet, 2 depth more than is required to float the largest man of war ind in one year, 67 feet of water fell from the sky, or sufficient to drown a three storied house. The mighty mountains that wall in India on the north form, in fact a run scieen which citches the appour clouds from the Southern Occin, and condenses them for the hot Bengal plans. The outer slopes of the Hamiliyas swell the Indian rivers by their torren's during the runy season their inner ranges and heights store up the runtill in the shape of snow, and thus form a vast reservoir for the steady supply of the Indian rivers throughout the year

This heavy runtill renders the southern slopes of the Himilary Himplicas very tertile, wherever there is any depth of tilth scenery

But, on the other hand, the torrents scour away the surface soil and leave most of the mountain sides bleak and bare The upper ranges he under eternal snow the intermediate heights form and grev masses but on the lower slopes, plateaux, and valleys forests spring up or give place to a rich though simple cultivation. The temperature fails about 31° F. for each thousand feet of elevation and the vegetation of the Himalwas is divided into three well marked zones, the tropical, the temperate and the arctic as the traveller ascends from the Indian plains. I damp belt of lowland, the tara, stretches along their foot and is covered with dense, tever breeding jungle, habitable only by rude tribes and wild beasts. Feithe duns or valleys penetrate their outer margin

In their eastern ringes adjoining the Lieutenant Governorship 1 - 417 of Ben\_al where the rainfall is heaviest, the tree fern flourishes ariid a magnificent vegeration. Their western or Punjah anges are barer But the rhododendron grows into a torest tree and large tracts of it are to be found throughout the whole length of the Hun lives. The diegar rises in stately masses. Thickets of hamboos, with their graceful light green torage beautify the lower valleys. Higher up the glistening arevilled mourtain onks with brown young leaves the Huna to in cedar Grooping's liver try sprices pines and the minimucd foliage of the chestnut wilnut, and maple, not to mention a hundred trees of a lower growth hung with bridd eits of operatis in spring and festoened with crimson virginia creepers in actimn, term, tegether with patches of the white ned r blossom a bill unt contrast to the stretches of scirlet and 1 ink rhododendron At hirvest time crops of millet ran in red ribands down the hinsides. The branches of the trees are themselves clothed in the dimper regions with a I surrant ar with of mosses, ferns levely orchids and flowering creepers. The Himplayes have enriched English parks and hothouses by the declar, the rhododendron and the orchid nd a great extension in the cultivation of the deodar and rl ododendron throughout british dites from the Himilian tair in 1848 of Sir Joseph Hooker, now Director of Kew Girdens. The high price of wood on the plains for railway sleepers and building purposes has caused many of the hills to be stripped of their forests, so that the rainfill now rushes quickly down their bare slopes, wishing away the surface soil and leaving no tilth in which new woods might Low up. The Lorest Department is endeavouring to repur Historyan this reckless denudation of the Himalay in woods

The hill tribes cultivate barley, oats, and a variety of

millets and small grains Vegetables are also raised on a large scale The potato, introduced from England, is a favourite crop, and covers many sites formerly under forest.

The hillman clears his potato ground by burning a ring round Clearing a the stems of the great trees, and then lays out the side of the hill fore-t mountain into terraces After a few years the bark and leaves drop off the branches, and the forest stands bleached and ruined Some of the trees rot on the ground, like giants fallen in confused flight, others still remain upright, with white trunks and skeleton arms. In the end, the rank green potato cropmarks the spot where a forest has been slain and buried Several of the ruder hill tribes follow an even more wasteful mode of mage Destitute of either ploughs or oxen, they burn down the jungle, and exhaust the soil by a quick succession of crops, raised by the hoe. In a year or two the whole settlement moves off to a fresh patch of jungle, which they clear and exhaust, and then desert in like manner

Rice is only grown in the Himalayas on ground which has Irrigation in untailing command of water-particularly in the damp and muli hot valleys between the successive ranges which roll upwards power into the interior. The hill nen practise an ingenious system of irrigation according to which the slopes are laid out in terraces and the streams are diverted to a great distance by successive parallel channels along the mountain-side ilso utilize their water power for mill purposes. Some of them are ignorant of cog wheels for converting the vertical movement of the mill wheel into the horizontal movement required for the grinding stone. They therefore place their mill-wheel flat instead of upright and lead the water so as to dash with great force on the horizontal puddles. A horizontal rotary movement is thus obtained, and conveyed direct by the axle to the millstone above

The chief saleable products of the Himalay is are timber, Himalayan charcoal, barley, miliets, poetitoes other vegetables honey, produce jungle products borix and several kinds of inferior gems Strings of ponies and mules striggle with their burdens along the narrow pathways, which are at many places mere ledges cut out of the precipice. The hilmen and their hard working wives load themselves also with pine stems and conical baskets of grain. The vak-cow and hardy mountain sheep are the tavourite beasts of burden in the inner ranges. The little 12k cow, whose bushy tail is manufactured in Europe into lace, patiently toils up the steepest gorges with a heavy burden on her back. The sheep, laden with bags of boray, are driven

to marts on the outer ranges near the plans, where they are shorn of their wool, and then return into the interior with a load of grain or salt Hundreds of them, having completed their journey from the upper ranges, are sold for slaughter at a nominal price of perhaps a shilling a piece, as they are not worth taking back to the inner mountains

Himalayan mmal

The characteristic animals of the Himalwas include the and tribes yak cow, musk-deer, several kinds of wild sheep and goat, bear, ounce, leopard, and fox, the eagle, great vultures pheasants of beautiful varieties, partridges, and other birds. Lthnologically, the Himilaras form the meeting ground of the Arrin and Turanian races, which in some parts are curiously mingled, although generally distinguishable. The tribes or broken clans of non-Arvan origin number over fifty with linguages, customs, and religious rites more or less distinct. The lifeling labours of Mr Brim Houghton Housson, of the Bengil Civil Service, have done much to illustrate the flora, frum, and ethnology of the Himilayas, and no sketch of this region would be complete without a reference to Mr. Hodgson's work

Second Region ci Inchalhe ti "the fr Kvei 1 411-

The wide plans watered by the Him dayan invers form the second of the three regions into which India is divided They extend from the Bay of Bengal or the cast, to the A shan froncer and the Arabian Sea on the west, and contain the richest and most densely crowded Provinces of the I mpire One set of invaders after another have, from pre historic times, entered by the passes on the north eistern and north western frontiers of India. They followed the courses of the rivers, and pushed the earlier comers southwards before them towards the sea. About 150 millions of people now live on and around these river plains in the Provinces known as the Lieutenant Governorship of Bengal, Assum the North-Western Provinces, Oudh, the Punjab, Sind, Raiputana and other Native 313,64

The lines Fiscr siste us of Ind a. (1) The Indu, with the 5114 (2) The Isan ; s or Birthina 1 d'ra

The vast 'evel tract which thus covers Northern India is watered by three distinct river systems. One of these river systems takes its rise in the hollow trough beyond the Hima lavas, and issues through their western ranges upon the Punjab as the Indus and Sutley | The second of the three river systems also takes its rise beyond the double wall of the Himalayas, not very far from the sources of the Indus and the Sutley It turns, however, almost due east instead of west, enters India at the eastern extremity of the Himalayas and becomes the Brahmaputra of Assam and Lastern Bengil. These rivers

collect the drainage of the northern slopes of the Himálavas. and convey it, by long, tortuous, and opposite rortes, into Indeed, the special feature of the Himálayas is that they send down the rainfall from their northern as well as from their southern slopes to the Indian plains. Of the three great rivers of Northern India, the two longest, namely the Indus with its feeder the Sutley, and the Brahmaputra, take their rise in the trough on the north of the great Himálayan wall That trough receives the drainage of the inner or northern escarpment of the Himalayas, together with such water supply as emerges from the outer or southern escarpment of the lofty but almost rainless plateau of Tibet

The third river system of Northern India receives the drainage (3) The of the outer or southern Himalayan slopes, and unites into Gangethe mighty stream of the Ganges In this way, the rainfall, Jumn. alike from the northern and southern slopes of the Himal yas, and even from the mountain buttresses of the Tibet plateau beyond, pours down upon the plains of India. The long and lofts spur of the outer Himalwas, on which stands Simla, the summer residence of the Government of India, forms the water shed between the river systems of the Indus and Ganges drainage from the west of this narrow ridge below the Simla Church flows into the Arabian Sca wind that which starts a few feet off, down the eastern side, eventually reaches the Bay of Bungal

The India (Sanskri, Sandlus Indos, Sulfos) rises in an the Inci unexplored region (lat 32" > long 81" E) on the slopes of the sacred Kulis mount in he Hysium or Sivas Paradise of ancient Sanskrit literature. The Indus has an elevation of about 16,000 feet at its source in Tibet, a draininge basin of 372,700 square miles, and a total length of over 1800 miles Shortly after it a uses within the Kashmir frontier it drops to 14,000 feet, and at I ch is only ibout 11,000 feet above the level of the sea. The rapid's ream dashes down ravines and wild mount un valleys, and is subject to tremendous floods the Indus bursts through the western ranges of the Hima layas by a wonderful gorge near Iskardoh, in North Western Kashmir-1 gorge reported to be 14 000 feet in sheer depth

Its great feeder the Stilly, rises on the southern slopes The Su'es of the Kullis mount un, also in libet. It issues from one of the sacred likes, the Ministrowar and Ravina-hrida (the modern Rikh is Tal), fumous in Hindu mythology, and still the resort of the Libetin shipherds. Starting at an elevation of 15,200 feet, the butlet passes south west across the plain of

Gugé, where it has cut through a vast accumulation of deposits by a gully said to be 4000 feet deep, between precipices of alluvial soil. After traversing this plain, the river pierces the Himalayas by a gorge with mountains rising to 20,000 feet on either side. The Sutley is reported to fall from 10,000 feet above sea-level at Shipki, a Tibetan frontier outpost, to 3000 feet at Rampur, the capital of a Hamalayan State about 60 miles inward from Simla During this part of its course the Sutley runs at the bottom of a deep trough, with precipites and bare mountains which have been denuded of their forests, towering above. Its turbid waters, and their unceasing roar as the river dashes over the rapids have a glooms and disquieting effect. Sometimes it grinds to powder the huge pines and cedars entrusted to it to float down to the plans the time it reaches Bilispur it has dropped to 1000 feet above sea-level. After entering But shotem, on the Sutley receives the waters of the Western Punjib, and falls into the Indus near Mithinkot after a course of 000 miles

lower correct I-45

I full account of the Indus will be found in the stack on that river in volume via of Tee Imperiar Graetteer of Incia About 800 miles of 15 course are passed among the Himalayas before it enters British territory, and it flows for cour 1000 miles more, southwest through the British Provides of the Panich and Sand. In its upper part it is forcable in meny places dering the cold weather but it is table to studen freshets, in one of which Rampit Smah is said to have ost a force, variously stried it from 1200 to 7000 forsemen while crossing in a ford. A hallow is above Attock, the Industreenes the Kabul river, which I rings down the waters if Northern Mananist in. The volume of those waters, as represented by the Kabui river is about equal to the volume of the Indus at the point of function at Attock the Indus has taller during a course of 860 miles, from its e'evation of 16,000 feet at its source in libet to under 2000 feet feet supply as fall during the remaining 940 miles of its course

The discharge of the Indis after receiving all its tributaries, varies from 40.857 to 446.086 cubic feet per second, according to the season of the year. The enormous mass of water spreads i self-over a channel of a quarter of a mile to a mile (or at times much more) in breadth. The effect produced by the evaporation from this fluvial expanse is so marked that, at certain seasons, the thermometer is reported to be 10. I lower close to its surface than on the surrounding and plains. The Indus supplies a precious store of water

for irrigation works at various points along its course, and forms the great highway of the Southern Punjab and Sind In its lower course it sends forth distributaries across a wide delta, with Haidarábad (Hyderabad) in Sind as its ancient political capital, and Karachi (Kurrachee) as its modern port The silt which it carries down has helped to form the seaboard islands, mud banks, and shallows, that have cut off the ancient famous emporia around the Gulf of Cambay from modern commerce

The BRAHMAILIRA, like the Sutley, rises near to the sacred The T-ar lake of Manasarowar Indeed, the Indus, the Sutles, and the Brahma Brahmaputra may be said to start from the same water-parting putra The Indus rises on the western slope of the Kailas mountain, the Sutley on its southern, and the Brahmaputra at some distance from its eastern base. The Mariam la and other saddles The Kailis connect the more northern Tibetan mountains, to which the watersled Kailas belongs with the double Himalavan wall on the south they form an irregular watershed across the trough on the north of the double wall of the Himalayas, thus, as it were, blocking up the western half of the great Central Asian trench The Indus flows down a western valley from this transverse watershed the Sutley finds a more direct route to India by a south western valler. The Brahmaputra, under its Tibetan name of Isan pu or Sangpu has its source in 31° v lat and 5, 1 long It flows enstwards down the Isan pu valley, passing not very far to the south of Lhasa the capital of Tibet, and probably 800 to 900 miles, or about one half of its total course, are spent in the hollow trough on the north of the This brief account assumes that the Brahmaputra of India is the true continuation of the Sangpu of Tibet result of the latest researches into that long mooted question the given under article BRAHMAPLIKA, in volume in of The Imperial Gazetteer of India

After receiving several tributaries from the confines of the The Chinese I mpire the river twists round a lofty eastern range of Brahma putra conthe Him day as and enters British territory under the name of fluents in the Din view near Sauly i in Assam - It presently receives two Assam confluents, the Dirane river from the northward, and the Brahmaputra proper from the east (lit 27 20 N, long 95° 50 E) The united stream then takes its well known appellation of the Brahmaputra, literally the 'Son of Brahma the ( reator' It represents a drainage basin of 361,200 square miles, and its summer discharge at Goalpara in Assam was

under the name of the Mfghna river, itself a broad and magnificent sheet of water

The Brahmaputra is famous not only for its vast alluvial de-Brahma posits, but also for the historical changes which have taken place putra silt in its course One of the islands (the Majuli char), which it has created in its channel out of the silt torn away from the distant Himálayas, covers 441 square miles Every year, thousands of acres of new land are thus formed out of mud and sand, some of them destined to be swept away by the inundations of the following year, others to become the homes of an industrious peasantry or the seats of busy river marts Such formations give rise to changes in the bed of the river-changes which within a hundred years have completely altered the course of the Brahmaputra through Bengal In the last century, the stream, on issuing from Assam, bent close round the spurs of the Garo Hills in a south-easterly direction. This old bed of the Brahmaputra, the only one recognised by Major Rennel in 1765-75, has now been deserted It retains the ancient name Great of the Brahmaputra, but during the hot weather it is little more changes in than a series of pools. The modern channel, instead of twisting round the Garo Hills to the east, bursts straight southwards towards the ser under the name of the Jamuna and is now separated at places by nearly 100 miles of level land from the main channel in the last century. A floating log thrown up against the bank, a sunk boat or any smallest obstruction, may cause the deposit of a mud island. Every such silt bank gives a more or less new direction to the main channel which in a few years may have eaten its way far across the plain and du\_ out for itself a new bed at a distance of several miles. Unlike the Ganges and the Indus the Brahmaputra is not used for artificial irrigation. But its silcharged overflow annually replenishes the land Indeed the plains of Lastern Bengal watered by the Brahmaputra yield unfailing harvests of rice, mustard, oil seeds and the exhaust ing jute crop year after year, without any deterioration The valley of the Brahmaputra in Assam is not less fertile, although inhabited by a less industrious race

The Brihmputra is the great high road of Pastern Bengal The and Assam Its tributaries and biturcations afford innumerable Brahma waterways, almost superseding roads, and it the same time high roat tendering road construction and maintenance very difficult. The main river is navigable by steamers as high up as DIBRICARII, about 800 miles from the sea, and its broad surface is crowded with country craft of all sizes and rigs, from

the dug-out canoe and timber raft to the huge cargo ship, with its high bow and carved stern, its bulged-out belly, and spreading square-sails. The busy emporium of Sirajganj, on the western bank of the Brahmaputra, collects the produce of the Districts for transmission to Calcutta. Fifty thousand native craft, besides steamers, passed Sirajganj in 1876.

bishma puti i traffe

The downward traffic consists chiefly of tea (to the value of about 11 million sterling), timber, caoutchouc, and raw cotton from Assam with jute, oil-seeds, tobacco, rice, and other grains from I astern Bengal. In return for these, Calcutta sends northwards by the Brahmaputra, European riece goods salt, and hardware while Assam imports from the Bengal delta, by the same highway, large quantities of nice (amounting to 14 749 tons in 1883-84) for the labourers on the tea plantations. The total value of the river-borne trade of the Brahmaj utra was returned at a little over three millions sterling in 1882-83. But it is impossible to ascertain the whole produce carried by the innumerable native boats on the Brihmipura. The railway system of India taps the Brahmy 11-2 at Gosland's and Dhubri while a network of channels through the Sundarbans supply a cheaper means of water trad it for belky produce peross the delta to Calcutta

Tic Conge As we Irous will its feeder the Su'lej, and the Brahmatic corvey to India the draining from the northern or libetan stopes of the Him layes so the Gan F, with its transactive the Tunna collects the runfull from the southern or Indian so es of sie mountain wall and pours it down upon the planes of Bengal. The Gannes triverses the central part of those planes at door pies a more prominent place in the listory of Irou in evaluation than either the Indus in the extreme was for the Islammaputa in the extreme east of Hirdustan. It is used to whose life to the south of the Himalians, and for thousands of years his formed an over raling factor in the development of the Indian rices.

The Ganges issues under the name of the Bhagirathi, from a necesser at the foot of a Himalia in snowbed, 13 800 feet a love the serdevel (lat 30 56 4 × long 79° 6′ 40 1). After a course of 1557 miles it falls by a network of estuaries it to the Bay of Bengal. It represents, with its tributaries, an enormous catchinent bisin, bounded on the north by a section of alm it 700 miles of the Himalayan ranges, on the south by the Vindhya modulatins, and embricing 391,100 square miles. Defore attempting a description of the functions performed by

the Ganges, it is necessary to form some idea of the mighty masses of water which it collects and distributes many variable elements affect the discharge of rivers, that calculations of their volume must be taken merely as estimates

At the point where it issues from its snowbed, the infant stream The is only 27 feet broad and 15 inches deep, with an elevation of growth 13,800 feet above sca-level During the first 180 miles of its Ganges course, it drops to an elevation of 1024 feet. At this point, Hardwar, its lowest discharge, in the dry season, is 7000 cubic feet per second Hitherto the Ganges has been little more than a snow fed Himálayan stream During the next thousand iniles of its journey, it collects the drainage of its catchment basin, and reaches Rajmahal about 1180 miles from its source It has here while still about 400 miles from the sea, a high Discharge flood discharge of 1,800,000 cubic feet of water per second, of Ganges and an ordinary discharge of 207 000 cubic feet, longest duration of flood, about forty days. The maximum discharge of the Mississippi is given at 1,200 000 cubic feet per second 1 The maximum discharge of the Nile at Carro is returned at only 362,200 cubic feet and of the I hames at Strines at 6600 cubic feet of water per second. The Meghan one of the many outflows of the Ganges is 20 miles broad near its mouth with a depth in the dry season, of 30 feet But for a distance of about 200 miles, the sea face of Bengal entirely consists of the estatines of the Ganges intersected by low islands and promontones for ned out of its silt

In forming our meas with regard to the (i nies, we must like begin by dismissing from our minus any larking comparison of Iun an its gigantic stream with the inversibility we are transfer with in England A smale one of its tributories the It MNA has an independent existence of 800 iniles with a eatch next basin of 118 000 square miles and starts from an elevation of its source of 10,849 feet above sealevel. The Ganges and its principal tributines are treated of in Inc II for a Gasettee of Inlia in separate aftices under their respective names. The following account confines itself to a brief sketch of the work which these Cangetic rivers perform in the I lains of Northern India, and of the position which they held in the thoughts of the people

Of all great rivers on the surf coof the globe, none can sanctive compare in smetity with the Ginges or Mother Ginga, as she of the is affectionately cilled by devout Hindus I rom her source in Ganges

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VOL. VI

<sup>1</sup> Hy baulo M rua', by I own 1) A Jackson Hydraulic Statistics, Table II , Appendix p 2 (1875)

To die and to be cremated on the river bank, and to have their ashes borne seaward by her stream, is the last wish of millions of Hindus Even to ejaculate 'Ganga, Ganga,' at the distance of 100 leagues from the river, say her more enthusiastic devotees, may atone for the sins committed during three previous lives

The Ganges has earned the reverence of the people by Work centuries of unfuling work done for them She and her tribu-done by tanes are the unwearied water carriers for the densely peopled Gange, provinces of Northern India, and the peasantry reverence the bountiful stream which fertilizes their fields and distributes their produce None of the other rivers of India comes near to the Ganges in works of beneficence The Brahmaputra and the Indus have longer streams, as measured by the geographer, but their upper courses lie beyond the great mountain wall in the unknown recesses of the Himalayas

Not one of the rivers of Southern India is navigable in They of the proper sense. The Ganges beams to distribute fertility carrier in l by irrigation as soon as she reaches the plains, within of Le al 200 miles of her source, and at the same time her channel becomes in some sort navigable. Thenceforward she rolls majestically down to the ser in a bountiful stream, which never becomes a merely destructive torrent in the rains, and never dwindles away in the hottest supriner. It ned by cinals, she distributes millions of cubic feet of water every hour in iringition but her dim aished volume is promptly recruited by great tributaries and the wide area of her carchment basin renders her stream mexhaustible in the service of man. I mbinkments are in lac few places required to restrum her inundations, for the alluvial sit which she spills over her banks affords in most pitts a top dressing of inexhaustible fertility. It one crop be drowned by the flood, the peasant comforts himself with the thought that the next crop from his sit manured fields will abundant's requite him The function of the Ganges as a land maker on a great scale will be explained hereafter

The Ganges has also placed a preemment put in the The commercial development of Northern India Until the open-Ganges ing of the railway system, 1855 to 1870, her magnificent highway stream formed almost the sole channel of traffic between of Bengal Upper India and the seaboard. The products not only of the river plains, but even the cotton of the Central Provinces, were formerly brought by this route to Calcutta Notwithstanding the revolution caused by the rulways, the heavier and more

bulky staples are still conveyed by the river, and the Ganges may yet rank as one of the greatest waterways in the world

Traffic on the The upward and downward trade of the interior with Calcutta alone, by the Gangetic channels, was valued in 1881 at over 20 millions sterling. This is exclusive of the sea borne commerce. At Bamanghata, on one of the canals east of Calcutta, 178,627 cargo boats were registered in 1876-77 at Hugh, a riverside station on a single one of the many Gangetic mouths, 124,357, and at Pathá, 550 miles from the mouth of the river the number of cargo boats entered in the register was 61571. The port of Calcutta is itself one of the world's greatest emporia for sea and river borne commerce. Its total exports and imports landward and seaward amounted in 1881 to about 140 millions sterling.

Not dimin thed by the authors

Articles of European commerce such as wheat, indigo, cotton, of ium, and saltpetre prefer the railway so also do the imports of Manchester piece goods But if we take into account the vast development in the export trade of oil seeds, rice, etc., still carried by the river and the growing interchange of food grains between various parts of the country it seems probable that the actual amount of traffic or the Ganges has increased rather than diminished since the opening of the railways At well chosen points along her course the iron lines touch the backs and these riverside intions form centres for collecting and estributing the produce of the surrounding country. The Ganges therefore is not motion arryal but a feeder of the rollway. Her ancien of its such as All MARAD. BENALS on PAINA, have this been tale to preserve their former importance while is in vitines like Sahii and GOALANDA have been rused into our ving river marts

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for unlike the Indis and the Irihma, with the Ganges is a river of great historic cities. Calentar Parka and Benakis are built on her banks. Alter and Interest on those of her or buth the Imma and Altaria is on the tongue of land where the two sofer streams unite. Many unbions of human beings live by commerce along her margin. Calcutta, with its suburbs on both sides of the river, commins a population of over \$1 of a million. It has a municipal revenue of \$270,000 to \$290,000 a sea borne and consting commerce of about 65 millions sterling, with a landward trade of 75 millions sterling. These figures vary from year to year, but show a steady increase. Calcutta lies on the Heelt, the most western of the mouths by which the Ganges enters the sea. To the eastwards stretches the delta, till it is hemmed.

in on the other side by the MLGHN, the most easterly of the mouths of the Ganges, or rather the vist estuary by which the combined waters of the Brahmiputra and Gangetic river systems find their way into the Bay of Bengal

In order, therefore, to understand the plains of Northern The pare. India, we must have a clear idea of the part played by the played by great rivers, for the rivers first create the land, then fertilize rivers it, and finally distribute its produce. The plains of Bengal were in many parts upheaved by volcanic forces, or deposited in an aqueous era, before the present race of man appeared. But in other parts they have been formed out of the silt which the rivers bring down from the mountains, and at this day we may stand by and watch the ancient process of land-making go on

A great Indian river like the Ganges has three distinct Thee stages in its career from the Himalavas to the sea. In crages he life the first stage of its course, it cashes down the Himalavas, a invercuting out for itself deep gullies in the soud rock ploughing First up glens between the mountains, and denucing the hillsides age of their soil. In widing over the Sutley feeders among the hills in the rains se son the incles are sore from the peobles which the size in curies with the white even in the lock weather, the rushing sind indigitive cuts a prickly se sucon across the feet

The second stage in the life of in Ind in river begins at the secon? point where it emerges from the mountains upon the claims singe It then runs percetully along the variets, searching out for itself the lowest levels It recei es the drainage and mud of the country on both sides, absorbs tributuries, and rolls forward with an ever increasing volume of water and I very torient from the H militis brings its separate contribution of new soil, which it has torn from the rocks or eroded from its banks. This process repeats itself through out more than ten thousand miles that is to say, down the course of each tributary from the Himalities or Vindhyas, and across the plans of Northern India. Dating the second stage of the life of a Rengil river therefore it forms a great open drain, which gradually deepens itself by crosion of its channel As ies bed thus sinks lower and lower, it draws off the water from swamps or lakes in the surrounding country Dry land takes the place of tens and in this way the physical configuration of Northern India has been greatly altered, even since the Greek descriptions 2000 years 130

As long is the force of the current is maintained by a

First and second stages of t great tiver, as a silt collector

sufficient fall per mile, the river carries forward the silt thus supplied, and adds to it fresh contributions from its banks Each river acquires a character of its own as it advances, a character which tells the story of its early life Thus, the Indus is loaded with silt of a brown hue, the Chenib has a reddish tinge, while the Sutley is of a paler colour amount of fall required per mile depends upon the specific grivity of the silt which it carries At a comparatively early stage, the current drops the heavy particles of rock or sand which it has torn from the Himples in precipices. But a fall of 5 inches per mile suffices to hold in suspension the great body of the silt, and to add turther accretions in passing through alluvial plains. The average full of the Ganges between Bennies and the delta head (about 461 miles) is nearly 5 inches per mile. In its upper course its average declivity is much greater, and suffees to bear along and pulverize the heavier spoils torn from the Himalivas

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By the time the Ganges reaches its delta in I ower Bengal (C Igong to Calcutta) is overage full per mile has dropped to 4 inches. I rom Cacut a to the sea the full varies in the i unicrous distributaries of the parent stream, according to the tude, from a to 2 inches. In the delta the current seldom suffices to carry the burden of its sit except during the rainand so deposits in 1

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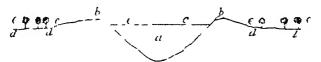
In I ower Bengal therefore the Ganges enters on the third stage of its life. Finding its speed checked by the equal level of the plains, and its bed rused by the deposit of its own silt it splies out into channels, like a jet of water suddenly obstructed by the finger, or a far of liquid dashed on the ground. Fach of the new streams thus created throws out in turn its own set of distributaries to right and left. The country which their many offshoots enclose and intersect forms.

If he following facts may be useful to observer and length who wish to study the most interesting feature of the county in which they live, namely the rivers. Ten inches per mile is considered to be the fall which navigable river should not exceed. The average fall either carges from the point where it unders with the Juniar at Allahabil Liberares (159 miles, is 6 inches per mile, from behaves to Colgon (320 index) 5 in he per mile from Colgong to the oclia head while the litting attractives off cibout 135 miles) 4 inches per mile, from the cella head to Calcutti (about 200 indes), also 4 inches per mile, from Calcutti to the second Hugh of the Nile from the first Catract to Cairo (555 miles) is 6½ inches per mile, from Cairo to the sec, it is very much less. The fall of the Missis suppose for the first limited miles from its mouth, is 150 inch per mile for the second hundred miles, 2 inches, for the third hundred, 2 30

the delta of Bengal The present delta of the Ganges may be The delta taken to commence at a point 1231 miles from its source, of Bengal and 326 from the sea by its longest channel At that point the head waters of the Hugli break off, under the name of the Bhagirathi, from the parent channel, and make their way south to the sea I he main volume of the Ganges pursues its course to the south east, and a great triangle of land, with its southern base on the Bay of Bengal, is thus enclosed

Between the Húgli on the west and the main channel on The the cast, a succession of offshoots strike southward from the deltaic Canges. The network of streams struggle slowly seaward tanes, over the level delta. Their currents are no longer able, by reason of their diminished speed, to carry along the silt or sand which the more rapid parent river has brought down from Northern India. They accordingly drop their burden of silt in their channels or along their margins, producing how they almond shaped islands, and by degrees raising their banks and channels above the surrounding plains. When they spill above sur over in time of flood the largest amount of silt is deposited country on their banks, or near them on the inland side. In this way not only their beds, but also the lands along their banks, are

SICHON OF A DULLING CHANNEL OF THE GANGES



a lie merchand tetwich raisell, successive depon of sliftom the spin water in time of flood the surface of the water when not in flood a the low lying swamp stret mag two from each of his into which the river flows when nop over it hinks in time of flood is the dated line region entitle ordinary level of the line region the ordinary level of the line region in the line

note for the fourth is ideal 2.57 inches and for the whole sector of 855 mass from the 110 has Memphis, the iverage fall is given as 41 to the to the mile.

The following time calculated by Mr David Stevenson ( $Cen^{-t}$  at the  $In_{s}e^{-t}$  in posts, shows the succurving power efficient various velocities

1: 11 Mile per re Second 0 170 will just be in to work on the clay • = 0,40 will litt bac sind t) 0 4545 will lift sind is coarse as linece l 5 0 6519 will sweep along time grivel 12 I 3038 will roll dong toun led pubbles I inch in diameter 24 = 2045 will sweep along slippers angular stones of the 30 size of in the

1)clta up into high level canals

The rivers of a delta thus build themselves up, as it were, rivershuld into high-level canals, which in the rainy season overflow their banks and leave their silt upon the low country on either side Thousands of square miles in I ower Bengal receive in this way each summer a top-dressing of new soil, cained free of cost for more than a thousand miles by the river currents from Northern India or the still more distant Himalayas a system of natural manuring which yields a constant succession of richerops

It netion of Ganges, Brahma

At Goalanda about half-was between the deltahead and the ser the Ganges unites with the main stream of the putta and Brahmaputra and further down with the Meghia Meghia bund waters solubit dalance assertions on the bined waters exhibit deltur operations on the most gigantic They represent the drunge collected by the two vast river systems of the Ginges and the Brahmaputra from an aggregate catchment basin of 752 000 scaare miles on both sides of the Himalayas together with the runfall poured imo he Meshna from the eistern Burmese watershed

Their Chian i dela

The forces thus brought into p is defer the control even of As the vist network of rivers creeps moden engineering farther down the delta they become more and more sleensh aid r ise their beds stal haber above the idacent flats. Fach set of change's has a depressed tractor swim on lether's deso that the lowest levels in a destable a rout half was between The stream constantly overflows into the c degreesed tracts, and grade all fills from the with its set. water which rushes from the river in othe swimps has some times the colour of pea-sorp from the print is of sit which it When it has stood a few days in the switches and the river flood subsides the water flows back from the swimps into he mer chand but his droped ill its sile in a is of a 1 clear dirk brown lue The stream us in the sympt and by degrees fids it at thus slowly creating rewland f large of the trees which have been submerzed be us witness As we shall presently see beried roots to be fresh deposit mil decived stamps are found at areat depths, while reater the top the excavator cemes upon the remains of old tanks, I hen poters, and other trices of hi min ridorations which will in historic times were a jove the group?

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He list scene in the life of an Indian two is a wilder e of crest and so imp at the end of the delti, intil whose to largers so ittade the network of tidal creeks merges into the Here il the series of Ind miling stand disclosed He exerchanials, fin lly checked by the dead weight of the en defort most of their remaining sut, which emerges from the estuary as banks or blunted headlands The ocean currents also find themselves impeded by the outflow from the rivers, and in their turn drop the burden of sand which they sweep along the coast The two causes combine to build up breakwaters of mingled sand and mud along the foreshore In this way, while the solid carth gradually grows outward into Land the sea, owing to the deposits of river silt, peninsulas and making islands are formed around the river mouths from the sand estuary dropped by the ocean currents, and a double process of land making goes on

The great Lidian rivers therefore, have not only support new solid ground by draining off the water from neighbouring lakes and marshes in their upper courses, and by depositing islands in their beds lower down. They are also constint v filling up the low lying tracts or swamps in their de'tas and are forming banks, and capies and masses of low lying land at their mouths. Indeed, they slowly construct their entire deltas by driving back the sea . Lower Egypt was thus the Fgypt, the Lift of the Nile necord no to her a riests in the age of Hero Gif of ne Nile dotus and the vast Province of Lower Bengal is in the structust sold in sense the gite of the Gines the Braima Pengal, putri and the Mechan I e act is of these have interest the systems are in modern times united into one, but thee Ganges distinct decilier's ire observable. The actuared of the Briling at commences near the beild where the ricr now twists it is south found the Garo H is 220 n testion the sea is the crow flow. The present deitahend of the Compes begins to the point where he Bh girl's breaks southward from the man changel, so the tizzo in 'es nine coline from the sea. The delea of the Meghn, which re, ese's the leavy sou hem runter of the Khasi HI's together with the western di muse of the witers ed be ween Bers 1 and Independent Bar na commences in Sylvet D's rict

The three decision stead or each forming a triangle tike the size or te Greek A, unite to taske a megular para degram, num is beneal inland 220 miles from the coast with an incruze breadth is so of about 220 miles. This vist allevillb short six 50,000 siv re miles was once covered with the ser and it has been slowly tilled up to the height of it least 400 feet by the de, osits which the rivers have brought down. In other words, the united river systems of the Ganges Brahmapara, and Meshna have forn iway from the Himacovas and North eistern Bengal enough erth to build up a lotty island, with in rea of 50,000 square in les and a height of 400 feet

Successive depres sions of the delan

Care has been taken not to overstate the work performed by the Bengal rivers Borings have been carried down to 481 feet at Calcutta, but the auger broke at that depth, and it is impossible to say how much farther the alluvial deposits may go. There seem to have been successive eras of vegetation, followed by repeated depressions of the surface. These successive eras of vegetation now form layers of stumps of trees peat heds, and carbonized wood. Passing below traces of recently submerged torests, a well-marked peat-bed is found in excavations around Calcutta at a depth varying from 20 to 30 feet, and decreed wood with pieces of fine coal, such as occur in moun ain stierns has been met with at a depth of 392 feet Fossized remains of animal life have been brought up from 372 feet below the present sur ite. The tootnote! thustrates the successive lavers of he vist and lofty island, so o speak, which the rivers have built up—in island will an area of 50 000 square miles, and 400 feet high from its founds ion although a places only a few inches above sea level

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1 ( 1) in they it of Proceeding of Committee opposite to sup in ten the Loring a For With , Decem er 1855 to April 1840' After percia og hro sitte sur re sort adeptiof a a to he as r in of si "Hue class 15 feet in thickness was me who but hely no this was a sal colored surrelas when less aneath durantel i first the almost are of vege then to this pose in order of pe ans necfarat 30 fee trintic suffee Postel var vr que to remote with and r nace and police il mate to ec est 120 ket when exhibite achese in aline et un s text e At 152 ec die jacks i l'ec mi errect i ter n, members wittelwe we not solved we are resulting true exittle late ext s the line at 1891 e - 1 c. win below time or the alternation of the feet in the n c ar nl sub-regard because of the trades, taken of a gradiented to a ferrogan ration. A fine single color 1"Ore, aid the his the new recent and the with trainer of anizantily is to a depth of 180 ecc. A 100 fee e virigitation which the problem of the artistic and a rederent trame soft hiestone with notates of line in any his contract me to ar the amestrannical and to spoke and a 350 kg. ere, coupe the late be human clarks, was extended to pooler a piece of superse that it hel was footed, and of epict'y severe trece of he ame subs in excee obtain. It 372 het in ber h ton was discovered but it could not be ren fed from the leabroke by the borer. At 302 feet a fix piece of me constant is in found to the beds of mount in stream, with some framen's I decated wood, were pieced out of the same and a good triggree thine the was been being. From 400 to 481 fee, the in the the rife is rite, into the editariels with himple consisted figures of principle 1 -, gener felgar, men, state and him stone provided in the d in the fine has been terminate

It should be remembered, however, that the rivers have Upper been aided in their work by the sand deposited by the Bengal ocean currents But, on the other hand, the alluvial deposits by river of the Ganges and Brahmaputra commence far to the north silt of the present delta-head, and have a total area greatly exceeding the 50,000 square miles mentioned in a former paragraph The Brahmaputra has covered with thick alluvium the valley of Assam, its confluent, the Meghna, or rather the upper waters which ultimately form the Meghna, have done the same fertilizing task for the valleys of Cachar and Sylhet, while the Ganges, with its mighty feeders, has prepared for the uses of man thousands of square miles of land in the broad hollow between the Himalayas and the Vindhyas far to the north-west of its present delta. A large quantity of the finest and lightest silt, moreover, is carried out to sea, and discolouis the Bay of Bengal 150 miles from the shore The plains of Bengal are out the ait of the arest incre-

Several intempts have been more to estimate the time which a the Garges and Brahma outra must have required for actor for accomplishing the right national. The borings a ready cited out together with an actional of Count by Council Band Smith in the Calcutta Journal of Natural II story and the Key Mr. I veresting to lations for a the chief materials for such an

Ganges and Jumna canals The Ganges Canal had, in 1883, a length of 445 miles, with 3428 miles of distributaries, an irrigated area of 856,035 acres (including both autumn and spring crops), and a revenue of £279 449, on a total outlay of  $2\frac{3}{4}$  millions sterling (£2 767,538 to 1883) The Lower Ganges Canal will bring under irrigation nearly 11 million acres (including both autumn and spring crops) It has already (1882-83) a main channel of 556 miles with 1991 miles of distributaries, an irrigated area of 606,017 acres, and a clear revenue of £107,000, or 413 per cent on the total outly up to 1883 (£2,589,624) The Fastern Junna Canal has a length of 130 miles, with 618 miles of main distribu-In 1883, the total distributaries aggregated nearly 900 miles with an irrigated area of 240 233 acres and a revenue of £82 665 or 284 per cent on the to al outlay to that year ( f 290,839) Inc Western Jumna Canal measures 433 miles, with an agree of 259 miles of disabating channels, besides private watercourses arresting an irea of 374,243 acres with a revenue of £74 656 or 84 per cent on a capital out vito 1853 of £884 952. The foir Ganges aid Jumna (analy therefore, a ready arrigate on aggregate area of over two malion acres and will electually irrigate over three millions. Among many other to dividence pieces in Upper India are the Alia Bari De > Roti Wand and Bijno Betway and the Sire Cien Band In it In heart in Cana-

The Ind in rivers to monotoner is we have seen the area. Lick test highways of the country. They supply clear transition the area collection distribution and export of the agricultial staples. What the arteries are a the high pooly the rivers are to the plans of being all. Put the very potential times causes terrible of mines. Search a year passes which a defloods, which sweep off cut he indicate a stores and the all tences cottages with any of standard activities of the probability of cut the order of the area of the cottages with any of standard activities and the all tences.

In their upper coases when their water is earled or counts to the fields the rich in atternation and breed fever and are in places rendered sterile by a same crust called relativities down the uncontrollable inversionage across the face of the country description and beds and searching out new channels for themselves, sometimes at costance of many miles. Their old banks, clothed with trees and dotted along their route with villages, run like high indices through the level rice-fields and mark the described coase of the river.

It has been shown how the Brihmiputri deserted its munchinnel of the list century and now tushes to the see by i

by a rapid contraction of the channel The obstructed influx. no longer able to spread itself out, rises into a wall of waters from 5 to 30 fect in height, which rushes onwards at a rate nearly double that of a stage coach Rennel stated that the Hugli bore ran from Hugh Point to Hugli Town, a distance of about 70 miles, in four hours. The native boatmen fly from the bank (against which their craft would otherwise be dashed) into the broad mid-channel when they hear its approaching roar The bore of the Meghna is so 'terrific and dangerous' that no boat will venture down certain of the channels at spring tide

The Indian rivers not only desert the cities on their banks, Hamles but they sometimes tear them away. Many a hamlet and torn as as rice field and ancient grove of trees is remorselessly eaten up each autumn by the current A Bengal proprietor has often to look on helplessly while his estate is being swept away, or converted into the bed of a broad, deep river. An important branch of Indian legislation deals with the proprietary changes thus crused by alluvion and diluvion

The overs have a tendency to straighten themselves out Rivi Their course consists of a series of bends in each of which tile vir current sets upriest one bank, which it indermines while it leaves still water on the other bank in which new acposits of land take place. By degrees these twists become slarper and sharper until the intervening land is comost worn away, leaving only a narrow tongue between the bends. The river firalis bursts through the slet der strip of soil or a canal is cut across it by human agency and direct communication is thus established be ween points formerly many miles distant by the windings of the river. It is process of eating away soil from the one bank against which the current sets and depositing silt in the still witer along the other bank is constantly at Even in their quiet moods, therefore, the rivers stend by steal land from the old owners, and give it to new ones

During the rains these forces work with uncontrollable fury Albana We have mentioned that the first terminus of the Lastern Bengal criminas wept Railway at Kushti i had been partially deserted by the Ganges away Its new terminus at Gorlanda has suffered from an opposite but equally disastrous recident. Up to 1875, the Goalanda station stood upon a massive embinkment near the waters edge, protected by misonry spurs running out to the river About \$130,000 had been spent upon these protective works, and it was hoped that engineering skill had conquered the violence of the Gangetic floods. But in August 1875, the

solid masonry spurs, the railway station, and the inagistrate's court, were all swept away and deep water covered their site. A new Goalanda terminus had to be erected two miles inland from the former river-bank. Higher up the Ganges, fluvial changes on so great a scale have been encountered at the river-crossing, where the Northern Bengal Railway begins and the Fastern Bengal Railway ends that no costly or per manent terminus has yet been attempted. Throughout the long courses of the Ganges and Brahmaputra, the mighty currents each autumn undermine and then rend away many tousind acres of solid land. They atterwards deposit their spot' in their channels further down, and thus, as has been slown leave high and dry in rain many in incient city on their banks.

Indian District requires an average fall of not less than 40 to 60 inches in order to grow rice as its staple crop A line might almost be drawn across Behar, to the north of which rice ceases to be the staple food of the people, its place being taken by millets, and in a less degree by wheat. There are, indeed, rice growing tracts in well watered or low-lying Districts of Northern India, and in the river valleys or deltas and level strips around the southern coast. But speaking generally, throughout North-Western, Central, and Southern India (except in the coast strip), rice is consumed only by the richer classes

The products of each Province are carefully enumerated in the scenery of

separate provincial articles in The Imperial Gazetteer of India the river and an account of the most important will be found under plains the heading of Agriculture in the present volume. They are here referred to only so far as is necessary to give a general idea of the scenery of the river plains. Along the upper and middle courses of the Bengal rivers, the country rises gently In Nor from the r ninks in fertile undutations, dotted with mid Wesera villages and adorned with noble trees. Mango groves seen the air with their blossom in spring, and yield their woundant truit in summer. The sprending banvan, with its colonnades if hanging roos the sixtely sipal with its green masses of folinge the wild cotton tree slowing while sent leafless with heavy crimson flowers the till cantily shaped tomarind, and the quick growing tail rear their heads above the crop he ds As the rivers approach the coast the palm trees take possession of the scene. The oremary landscape in the celta is a flat stretch In the of rice fields fringed for id with in everyteen border of bam de a boos cocon nuts dictices are i, and other coronetted palms His densely peopled tract seems it first sight bire of villages for each hamlet is hidden an a amid a sown grove or partita no

and wealth away trees. The banboo and cocoanic play a conspicions part in the industrial life of the people, and the numerous products derived from them including rope oil, food, todder, tuel and timber, have been dweit on with

The crops also change is we sail down the invers. In the Crops of north, the principal grains are wheat, barles, Indian corn, Western and a variety of millets, such as just (Sorghum vulgare) and Bengu bajra (Pennisetum typhoideum). In the delta, on the other of the hand, rice is the stiple crop, and the universal diet. In a delta single District, Rangour, there we 295 separate kinds of nee known to the peasant 1 who has learned to grow his favourite

1 Maristi al 1 unt of Braul, vol vu pp 234-257

admiration by many writers

crop in every locality, from the comparatively dry ground, which yields the *dman* harvest, to the swamps 12 feet deep, on the surface of whose waters the tike ears may be seen struggling upwards for air Sugar-cane, oil seeds, flix, mustard, sesamum, palma christi, cotton tobacco indigo safflower and other dyes, ginger contander red pepper capsicum cummin, and precious spices are grown both in the Upper Provinces, and in the moister valleys and delta of I ower Bengal

Inage three o

I whole pharmacopicia of medicines, from the well known aloe and castor-oil to obscure but valuable febrifuges, is derived from shrubs herbs, and roots Resins, gums, varnishes india rubber perfume oils and a hundred articles of commerce or luxury are obtained from the fields and the torests. Vegetables both indicenous and imported from Europe largery enter into the food of the people and huge we low pumpkin spread themselves over the thatched oofs fields of potato trina and vins are attached to the homesteads. The tea plant is reared on the hilly ranges which skirt the pains but in the North West and in Assam the control people about half way down the Ganges around Benates and in Benar, the sickworm property still farther down in I ower Bengal while the rate fibre is essentially a crop of the delta and would exhaust any son not fertilized by tive floods

the sake of easy remembrance, therefore, we may take the inhabitants of the river plains in the north at about 150 millions. and the inhabitants of the southern table-land at 100 millions

The Deccan, in its local acceptation, is restricted to the The high inland tract between the Narbada (Nerbudda) and the Deccan Kistna rivers but the term is also loosely used to include the whole country south of the \indhyas as far as Cape Comorin Taken in this wide sense, it slopes up from the southern edge of the Gangetic plains. Three ranges of hills support its Its three northern its eastern and its western side, the two latter supporting mountain meeting at a sharp angle near Cape Comorin

The northern side is buttressed by confused ranges, with a The general direction of east to west, popularly known in the Vindhya moun aggregate as the Vindhya mountains The Vindhyas, how-tains ever, are made up of several distinct hill systems. Two sacred peaks stand as outposts in the extreme east and west, with a succession rather than a series of ranges stretching 800 miles between At the western extremity Mount Abu, famous for its exquisite I an temples, rises, as a solitary outlier of the Arwalli hills 565, feet above the Rappatana plans like an island out of the sea. Beyond the southern limits of that heir plain the Vindhya range of modern geography runs almost various due east from Gujard forming the northern wall of the Nar bada villey. The Satjaria mountains stretch, also east and west, to the south of the Narbada river, and form the watershed between it and the I pt I lowards the heart of India, the distern experiments of the Vindhyas and Satpuras end in the highlinds of the Certifi Provinces still east, the hill system ands a continuation in the Kaimer These in their turn end in the range and its consensis outlying peaks and spurs that mark the western boundary of Lower Bengal and ibut on the old course of the Ganges under the name of the Ramahai hills. On the extreme east Mount Purasnath like Mount Abu on the extreme west sacred to Jun rites lises to 4479 feet above the Gangetic plum

The virious ranges of the Vindhyas from 1500 to over 4000 feet high, form, is it were the northern wall and buttresses which support the central table and But in this sense the Vindhy's must be taken as a loose convenient the generalization for the conseries of mountains and table lands barrier between the Gangetic plains and the Narbada valler. Now between pierced by road and rulway, they stood in former times as a Northein barrier of mountain and jungle between Northern and Southern Southern India, and formed one of the main difficulties in welding the India

whole into an empire They consist of vast masses of forests, ridges, and peaks, broken by cultivated tracts of the rich cotton-bearing black soil, exquisite river valleys, and high lying grassy plains.

The Ghats

Listern Unis

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Chu .

The other two sides of the elevated southern triangle are known as the Eistern and Western Ghars These ranges start southwards from the eastern and western extremities of the Vindhyas, and run along the eastern and western coasts of India. The Fastern Ghats stretch in fragmentary spurs and ridges down the Madras Presidency receding inland and leving bread level truets between their base and the coast The Western Ghats form the great sea wall of the Bombay Presidence, with a comparatively narrow strip between their nd the shore. Some of them rise in inagnificent precipites re headlands out of the ocean and truly look like colossal laiding stars of the from the sea. He L stein or Madras Chirts recede at words to average elevation of 1500 feet The Western or Bombos Goods assend more abruptly from the ser to a terme heigh, or about 3000 feet with reaks it, in 4700 mong the cons is a to 7000 teet and even 8760 feet n the Lineared in a where they are with the listen

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love levered of the ser. I'm is coated with 3000 ILC grades is so much with tanger excited a 4000 feet in the 1th I sheer a min' long a Nine salb a Maintenas with the - rinere, alor Me is Uak need wer zooo keel more re ser. I'er ichest pon a Dodinett ferk Sypo teet n the cibered a then the the memor p' teau is on to western see . I'm by the forest of a condition to the forest of a condition of the complete a condition to the cond Jensey Lemerco - Vik box 40 mile so the est of Bimbry city, and eight of 2027 feet. In incient anes a was reguled as c key to the Dece n, and could be led by a small band a unstrains arms attempting to penetrate from the coast. A c lebrated to littiry road was constructed by the British no t as pass, and proceedly give the command of the interior to their rengipite of Lamber Armby hine his now been carried up the Lorge twisting roand the shoulders of moun rans tunnelling through intervening crass, and chinging along carrow ledges to the face of the precipice. At one point the merag is so sharp as to render a circuitous turn impossible, and the trains have to stop and reverse their direction on a 'evelled terrace. The Thall Chat (1912 feet), to the no th

east of Bombay, has in like manner been scaled both by road and the and railway. Another celebrated pass, farther down the coast, Ghat connects the military centre of Belgaum with the little port of Vengurla

These 'landing-stairs' from the sea to the interior present scenes of rugged grandeur. The trap rocks stand out, after ages of denudation, like circular fortresses flanked by round Hill for stowers and crowned with nature's citadels, from the mass of hills behind, natural fastnesses, which in the Maratha times were rendered impregnable by military art. In the south of Bombay, the passes climb up from the sea through thick forests, the haunt of the tiger and the mighty bison. Still farther down the coast, the western mountain wall dips deep into the Palghát valley—a remarkable gap, 20 miles broad, Tre Lal and leading by an easy route, only 1000 feet in height, from grat Pa the seabourd to the interior. A third railway and military road penetrate by this passage from Beypur, and cross the peninsula to Madras. A fourth railway scarts inland from the coast at the Portuguese Settlement of Goa.

On the castern side of India the Ghats form a series of The ison spurs and buttresses for the elevated inner plateau rather of the inner than a continuous mound in will. They are traversed by a plateau number of broad and easy passages from the Madras coast. Through these openings, the rainfall of the southern half of the inner plateau reaches the sea. The drainage from the northern or Vindham edge of the tire sided table land fals into the Ganges. The Nullida (Neibadda) and Tapu carry the rainfall of the southern slopes of the Vindhams and of the Supura Hills by two almost parallel lines into the Gulf of Cambay. But from Surat, in late 21, 28 to Cape Comorna 1, late 4', no great river succeeds in piercing the Western Chais, focks or in reaching the Bomory coast from the interior table and

The Western Chais for n, in fact, a lotts unbroken burner between the waters of the central plateau and the Indian Ocean. The draining has therefore to make its way across as drum India to the eastwards now forming and twisting sharply wards round projecting ranges, then turbling down rayines, roaring through rapids, or rishing along valleys until the run which the Bombay sea breach has dropped on the ridges of the Western Chais finally falls into the Bay of Bengal. In this way, the three great rivers of the Madris Presidency, viz the Godivan, the Kistna (Krishna), and the Kiven (Ciuvery), rise in the mountains overhanging the Bombay coast, and triverse the whole breadth of the central

table-land before they reach the sea on the eastern shores of India.

Historical -lemifi cance of

The physical geography and the political destiny of the two sides of the Indian peninsula have been determined by the the Eastern characteristics of the mountain ranges on either coast. On the and West-ern Ghats east, the Madras country is comparatively open and was ilways accessible to the spread of civilisation (In the cast, therefore, the ancient dynasties of Southern India fixed their capitals Along the west, only a narrow strip of lowland intervenes between the barrier range and the Bombay scaboard western tract long remained apart from the civilisation of To our own day, one of its ruling races the eastern coast the Nairs actain land tenures and social customs, such as poly andry, which mark a much ruder sage of human advancement than Hinduism and which in other parts of India only linger among isolated hill tribes. On the other hand, the people nd of de of this western or Bombiy coast enjoy a bountiful runfall unknown in the inner plate u and the east The monsoon dashes its run laden clouds against the We tern Chats and yours from 100 to 200 inches of rain upon their maritime s opes from Khandish down to Malabir By the time the monsoon his crossed the Western Glats at his dropped the creater part of its aqueous builden and central Districts, such as Bangalore, obtain only also as inches The eistern coast dso receives a monsoon of its own that except in the neighbourhood of the sea, the rainful throughout the Madris Presidency is scanty, seldom exceeding 40 inches in the year The deltas of the three great rivers along the Madras coast form however tracts of mexhaustible fertility, and much is done by irrigation to busband and talize both the local rainfall and the accemulated waters which the rivers bring donn

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The ancient Sanskrit poets speak of Southern India as buried under forests. But much of the forest land has 2+idually been denieded by the axe of the cultivator, or in consequence of the deterioration produced by unchecked fires and the grazing of innumerable herds of cuttle sheep, and Roughly speaking Southern India consists of four forest regions-I irit, the Western Chats and the plains of the Konkan, Malabár, and Travancore between them and the sea, second, the Karnatik, with the Lastern Chats, occupying the linds along the Coromandel coast and the outer slopes of the hill ranges behind them third, the Decean, comprising the high plateaux of Hindarábád, the Ceded Di tricts, Mysore,

Combatore, and Salem, fourth, the forests of the Northern Circars in the Madras Presidency

Each of these Districts has its own peculiar vegetation Forests of That of the first region, or Western Ghats, largely consists of Western virgin forests of huge trees, with an infinite variety of smaller shrubs, epiphytic and parasitic plants, and lianas or tangled creepers which bind together even the giants of the forest The king of these forests is the teak (Tectona grandis, Linn) I his prince of timber is now found in the greatest abundance in the forests of Kanara, in the Wynad, and in the Anamalai Hills of Coimbatore and Cochin tree (Calophyllum mophyllum, Linn) is more especially found in the southernmost forests of I ravancore and Tinnevelli, where tall straight stems, fit for the spars and masts of seagoing ships, are procured The jack fruit (Artocarpus integrifolia, Linn) and its more common relation the aim (Artocarpus hirsuta, Lam), furnish a preity yeliow coloured timber, the blackwood (Dalbergia latifolia, Rozb) yields huge logs excellent for carved The Terminalias (I tomentosa and T paniculata, II and A) with the bentcak (Lagerstreemin microcarpa, Wight) supply strong wood suitable for the well built houses of the prosperous population of Malabar and Travancore dammer tree or Indian copal (Vater a indica, Linn) yields its The ground vegetation supplies one of the most valuable of Indian exports, the cardamom. To enumerate all the important trees and products of the Western Ghats would, however, be impossible

In the Karnatik region, the forests rarely consist of large Forests of timber, in consequence of the drier climate and the shorter Eastern Ghats and monsoon runs Nor are they of a wide area. Most of the Karnatik forests consist of what is known as Evergreen Scrub,' in which the prominent trees are the Eugenia ambolana, Lam, Mimusops indica, Jinn, and the struchnine (Struchnos nuv vomica Linn) On the slopes of the hills deciduous forest appears with teak,

Lerminalias, Anogeissus, and occasional red sanders

The Dece in region, which gets a share of both monsoons Forests (nuncly the monsoon from the south-west from June to Sep of he tember, and that from the north-cast from September to January), has still some large are is covered with fine forest, and yielding good timber. Chief among these areas are the Nallamalar Hills of Kurnul, the Pulkonda Hills of Cuddapah, the Collegal Hills of Combatore, and the Shevaroy and layadi ranges of Silem and North Arcot In the Vallimilai Hills, byasal (Pterocurpus Marsupium, Roab) and say (Tei-

eistern side of the Bay of Bengal Between the narrow maritime tract and the Irawadi valley runs a backbone of lofty ranges These ranges, known as the Yoma (Roma) mountains, are covered with dense forests, and separate the Irawadi valley from the strip of coast. The Yoma ranges have peaks exceeding 4000 feet, and culminate in the Blue Mountain, 7100 feet. They are crossed by passes, one of which, the An or Aeng, rises to 4517 feet above the sea level I thousand creeks indent the scaboard and the whole of the level country both on the coast and in the Irawadi villev. torins one vast rice field. The rivers float down an abund int sapply of teak and bamboos from the north er excellent quality, supplies the eights which all Burmese men, women, and children; smoke, and affords in industrial product of increasing value. Arakan and Pegu, or the Provinces of the coast strip and also the Iriwadi valley, contain mineral oil springs. I chasserim forms a long narrow maritim. Province renning southward from the mouths of the Irawadi to Point Victoria, where the British territory adjoins Siam I enasserim is rath in tin mines, and contains iron ores equal to the finest Swedish besides gold and copper in miller quantities, and a very pure limestone. Rice and inher form the staple exports of Burma, and nee is also the universal food of the people. British Burma including lenasserim has an area of over \$7,000 square miles, and a opulation, in 1851, of 34 million persons. It is fortunite in sill possessing wide are is of vet uncel is ited land to meet the wants of its rapidly increasing people !

Since these sneets went to press the persistent misconduct of King Thebiu in Upper Burna, his obscinate denial of justice, and his frustration of Ford Dutterin's earnest endea vairs to arrive at a conclusiony settlement, compelled the British Government to send in expedition against him. A torce under General Prender, ist advinced up the Iriwidial ley with little of position, and occupied Mandalay. King Piebau surrendered and was removed to honourable confinement in British Iricia. His territories were annexed to the for tish Empire, by Ford Duffer his Proclamation, on the 1st of I mary 1836.

## CHAPTER II

#### THE PEOPLE

THE POPULATION OF INDIA, with British Burma, amounted General in 1881 to 256 millions, or, as already mentioned, more than survey of the People double the number which Gibbon estimated for the Roman I moire in the height of its power But the English Government has respected the possessions of native chiefs, and onethird of the country still remains in the hands of its hereditary rulers I heir subjects make about one-fifth of the whole Indian The British territories therefore, comprise only twothirds of the area of India and about four-fifths of its inhabitants

The native princes govern their States with the help of The Feu certain Figlish officers, whom the Viceroy stations in native datory Chief Some of the Chicis reign almost as independent sovereigns, others require more assistance, or a stricter control. They form a magnificent body of feudatory rulers possessed of revenues and armies of their own The more Their important of these princes exercise the power of life and death various over their subjects, but the authority of each is limited by usage or by treaties or engigements acknowledging their subordination to the British Government 1 hat Government, as Suzerain in India, does not allow its feudatories to make war upon each other, or to have any relations with foreign States. It interferes when any chief misgoverns his people rebukes, and if needful removes, the oppressor protects the weak and firmly imposes peace upon all

The British possessions are distributed into twelve govern British ments each with a separate head but all of them under the India—the Iwelve orders of the supreme (sovernment of India, consisting of Provinces, the Covernor General in Council The Covernor General who the bears the title of Viceros holds his court and government at Calcutta in the cold weather and during summer at Simly, in outer spur of the Himalayas, 7000 feet those the level of the sea. The Viceroy of India, and the Covernors of Madras and Bombay are usually British statesmen appointed in Lingland by the Queen. The heads of how the other ten Provinces are selected for their ment from the governed

Angio Indian scivices, and are nominated by the Vicetoy, subject in the case of the Lieutenant Governoiships to approval by the Secretary of State.

The Census of 1881 returned a population of 256 396,646 souls for all Inca. The following tables give an abstract of the area is a population of each of the British Provinces, and

THE IMPLY GOVERNALIS OF PROVINCES OF

groups of Native States, together with the French and Portuguese possessions in India The population in 1872 was as follows—British India, 186 millions, Feudatory States, over 54 millions, 1 rench and Portuguese possessions, nearly 3 of 2 million, total for all India, 240,931,521 in 1872

THE THIRDIN GROUPS OF NATIVE STATES FORMING
THE FATOR A TOTAL AND A STATES

Density of the popu lation.

compared

I ngland

with

British India, therefore, supports a population much more than twice as dense as that of the Native States. exclude the outlying and lately-acquired Provinces of British Burma and Assam, the proportion is nearly three-fold, or 260 persons to the square mile How thick this population is, may be realized from the fact that France had in 1876 only 180 people to the square mile, while even in crowded England, wherever the density approaches 200 to the square mile it Franceand ceases to be a rural population, and has to live, to a greater or less extent, by manufactures, mining, or city industries 1 Throughout large areas of Bengal, two persons have to live on the proceeds of each cultivated acre, or 1280 persons to each cultivated square mile. The Famine Commissioners reported in 1880, that over 6 millions of the peasant holdings of Bengal, or two-thirds of the whole, averaged from 2 to 3 acres a-picce Allowing only four persons to the holding, for men, women, and children, this represents a population of 24 millions struggling to live off 15 million acres, or a little over half an acre a niece

A'sence of large town

chirely

rural

Unlike England, India has few large towns and no great manufacturing centres Thus, in England and Wales 42 per cent, or nearly one-half of the population in 1871, lived in towns with upwards of 20,000 inhabitants, while in British Irdia only 41 per cent, or not one twentieth of the people. Longitum live in such towns. India, therefore, is almost entirely a rural country, and many of the so called towns are mere groups of villages, in the midst of which the cattle are driven a field, and ploughing and reaping go on Calcutta itself has grown out of a cluster of hamlets on the bank of the Hugh and the term 'muricipality,' which in Furope is only applied to towns often means in India a 'rural union,' or collection of home steads for the purposes of local government

() ercrow feel In in

We see, therefore, in India, a dense population of husband Wherever their numbers exceed 1 to the acre, or 640 to the square mile,—excepting in suburban districts or in irrigated tracts,—the struggle for existence becomes hard At half an acre a piece that struggle is terribly hard Districts, a good harvest yields just sufficient food for the people, and thousands of lives depend each autumn on a few The Government may, by inches more or less of rainfall reat efforts, feed the starving in time of actual famine, but it cannot stop the yearly work of disease and death among a steadily underfed recorde In these overcrowded tracts the

<sup>1</sup> Report on the Census of England and Wales for 1871

population reaches the stationary stage For example, in Allahábád District during twenty years, the inhabitants increased by only 6 persons in 10,000 each year During the nine years from 1872 to 1881, the annual increase was 8 persons in 10,000 In still more densely-peopled localities upon the line of railway, facilities for migration have drained off the excessive population, and their total number in 1872 was less than it had been twenty years before On the other hand, in thinly-peopled Provinces the inhabitants quickly multiply Under-Thus, when we obtained the District of Amherst in 1824 from peopled the king of Burma, it had been depopulated by savage native wars The British established their firm rule, people began to flock in, and by 1829 there were 70,000 inhabitants fifty years the population had increased by more than fourfold, or to 301,086 in 1881

In some parts of India, therefore, there are more husband. The 'immen than the land can feed, in other parts, vast tracts of fertile Indian In England the people would peasan soil still await the cultivator move freely from the over-populated districts to the thinlyinhabited ones, but in India the peasant clings to his hereditary homestead long after his family has outgrown his fields If the Indian races will only learn to migrate to tracts where spare land still abounds, they will do more than the utmost efforts of Government can accomplish to prevent famines

The facts disclosed by the Census in 1872 and 1881 prove Move indeed, that the Indian peasant has lost something of his ments of old immobility The general tendency of the population in Bengal is south and east to the newly-formed delta, and north-east to the thinly-peopled valleys of Assam it was ascertained that out of a specified population of 247 millions, nearly 61 millions were living in Provinces in which they had not been born. But the clinging of the people to their old villages in spite of hardship and fimine still forms a most difficult problem in India

Throughout many of the hill and border tracts land is so plentiful that it yields no rent. Any one may settle on a patch which he clears of jungle, exhausts the soil by a rapid succession The of crops, and then leaves it to relapse into forest. In such tracts nomadic no rent is charged, but each family of windering husbandmen of huspays a poll-tax to the chief, or to the Government under whose bandis protection it dwells. As the inhabitants increase, this nomadic system of cultivation gives place to regular tillage Throughout British Burma we see both methods at work side by side. while on the thickly-peopled plains of India the 'wandering

husbandmen' have long since disappeared, and each household remains rooted to the same plot of ground during generations

Labour and land in the last century,

In some parts of India, this change in the relation of the people to the land has taken place before our own eves. Thus, in Bengal there was in the last century more cultivable land than there were husbandmen to till it. A hundred years of British rule has reversed the ratio and there are now, in some Districts, more people than there is land for them to till change has produced a silent revolution in the rural economy of the Province. When the English obtained Bengal in the last century, they found in many Districts two distinct rates of rent current for the same classes of soil. The higher rate was and by the than rayats literally 'stationary tenants, who had their houses in the hamlet and formed the permanent body of cultivators. These tenants would bear a great deal of extortion rather than forsike the lands on which they I id expended labour and capital in digain, tanks, cutting irrelation channels, and building homesteads. I say were oppressed accordingly, and while they had a right of occupation in their holdings, so long as they prid the rent the very highest rates were squeezed out of them I he temporary or windering cultivators paikhast sajats were those who had not their homes in the village, and w o could therefore leave it whenever they pleased "ad no right of occasioney in their fields but on the other hand, the landlord could not obtain so high a rent from them. as there was plenty of spare land in adjoining vilriges to which they could retire in case of on ression The landlords were at that time competing for ten ints and one of the commonest complaints which they brought before the Company's offic as was a charge against a neighbouring proprietor of 'enticing away their cultivators' by low rates of rent

an i at the present day

This state of things is now reversed in most parts of Bengal. The landlords have no longer to compete for tenants. It is the husbandmen who have to compete with one another for land. There are still two rates of rembut the lower rates are now paid by the 'stationary' tenants, who possess occupancy rights, while the higher or rack-rents are paid by the other class, who do not possess occupancy rights. In ancient India, the eponymous hero, or original village founder, was the man who cut down the jungle. In modern India, special legislation and a lorest Department are required to preserve the trees which remain. Not only has the country been stripped of its woodlands, but in many

Districts the pastures have been brought under the plough, to the detriment of the cattle The people can no longer afford to leave sufficient land fillow, or under grass, for their oxen and cows

It will be readily understood that in a country where, almost Serfdom down to the present day, there was more land than there in India were people to till it, a high value was set upon the cultivating In tracts where the nomadic system of husbandry survives, no family is permitted by the native chief to quit his territory For each household there pays a poll tax many parts of India, we found the lower classes attached to the soil in a manner which could scarcely be distinguished from prædial slavery. In spite of our legislative enactments, this system lingered on during nearly a century of British Our early officers in South Eastern Bengal, especially in the great island of Sandwip, almost raised a rebellion by their attempts to liberate the slaves Indeed, in certain tracts where we found the population very depressed, as in Behar, the courts have in our own day occasionally brought to light the survival of serfdom. A feeling still survives in the minds of some British officers against migrations of the people from their own Districts to adjoining ones, or to Native States

If we except the newly-annexed Provinces of Burma Unequal and Assam, the population of British India is nearly three pressure of the popular times more dense than the population of Feudatory India tion on the This great disproportion cannot be altogether explained by land differences in the natural capabilities of the soil. It would be for the advantage of the people that they should spread themselves over the whole country, and so equalize the pressure throughout. The Foudatory States he interspersed among British territory, and no costly migration by sea is involved. That the people do not thus spread themselves out, but crowd together within our Provinces is puth due to their belief that on the whole, they are less hable to oppression under British rule than under native chiefs. But any outward movement of the population even from the most densely peopled English Districts, would probably be regarded with pain by the local officers. Indeed, the occasional evodus of a few cultivators from the overcrowded Province of Behar into the thinly-peopled frontier State of Nepil, has formed a subject of sensitive self reproach. In proportion as we can enforce good government under the native chiefs of India we should hope to see a gradual movement of the people into the Feudatory States There is plenty of land in India for the whole VOL. VI

What is required is not the diminution of the population people, but their more equal distribution

Census of 1881

The Census, taken in February 1881, shows an increase of 151 millions for all India, or 64 per cent, during the nine years since 1872 But this general statement gives but an imperfect insight into the local increment of the people while in the southern Provinces, which suffered most from the famine of 1877-78 the numbers have stood still, or even receded,

the people

Increase of an enormous increase has taken place in the less thicklypeopled tracts Thus the British Presidency of Madras shows a diminution of 14 per cent, while the Native State of Mysore, which telt the full effects of the long continued dearth of 1876-79 had 17 per cent fewer inhabitants in 1881 than The Bengal population has increased by 11 per cent in the nine years, notwithstanding the milder scarcity of 1874 But the great increase is in the outlying under peopled Districts of India, where the pressure of the inhabitants on the soil has not yet begun to be felt and where thousands of acres still In Assim the increase (1872-81) has await the cultivator been 19 per cent —largely due to immigration, in the Central Provinces, with their Feudatory States and tracts of unreclaimed jungle, 25 per cent, in Berir (adjoining them) 20 per cent, while in Burma-which most of all the British Provinces stands in need of inhabitants—the nine years have added 36 per cent, to the population, equivalent to doubling the people in about twenty-five years

Ine following table compares the results of the Census of 1872 with those of the Census of 1881. It should be borne in mind however that the Census of 1872 was not a synchron ous one and that in some of the Native States the returns of 1872 were estimates rather than ac ual enumerations.1

THE ETHNICAL HISTORY OF INDIA—The statistical elucida Fthnotion of the races and Provinces of India can only be effected logy by tabular forms. At the end of this volume, therefore, will be found a series of ten statements dealing with the various aspects of the Indian population. The briefest summary of the ethnological elements which compose that population is all that can be here attempted.

European writers formerly divided the Indian population into Four fold two races—the Hindus and the Muhammadans But when we division of the look more closely at the people, we find that they consist of four People well-marked elements These are, first, the recognised non- (1' Non Aryan Tribes, called the Aborigines, and their half-Hinduized Aryans descendants, numbering over 171 millions in British India Second, the comparatively pure offspring of the (2) Aryans Aryan or Sanskrit-speaking Race (the Brahmans and Rájputs), about 16 millions in 1872 Third, the great Mixed Population, known as the Hindus which has grown out (3) Mixed of the Aryan and non-Aryan elements (chiefly from the Hindus latter), 111 millions in 1872 Fourth, the Muhammadans, (4) Mu-41 millions These made up the 186 millions of people under hamma dans British rule in 1872 The same four-fold division applied to the population of the 54 millions in Feudatory India in 1872, but we do not know the numbers of the different classes

The figures for 1872 are reproduced in the last paragraph, as the Census of 1881 adopted a different classification, which

Portuguese Possessions is due to more accura elenumera ion in 1881, cannot be exactly ascertained

- <sup>1</sup> Viz Table I Area, villages, houses and population, etc., in each Province of British India in 1881
  - ,, II Distribution into town and country, or 'towns and villages in British India'
  - ,, III Cultivated cultivable, and uncultivable land in Provinces for which returns exis
  - ,, IV Population of British India classified according to age and sex
  - V Population of British India classified according to religion
  - ,, VI Asiatic non Indian population of bit ish India classified according to birth place
  - " VII Non Asiatic population of Bri ish India classified according to birth-place
  - ,, VIII Town population of India being a list of the 149 towns of British India, of which the population exceeds 20,000
    - IN Population of British India according to education
  - ,, X Population of British India, classified according to caste, sect, and nationality

does not so clearly disclose the ethnical elements of the people. This difference will be more fully explained in the next chapter.

According to the Census of 1881, the comparatively pure descendants of the Aryan race (the Bráhmans and Raiputs) still numbered 16 millions in British India, the mixed population, including lower caste Hindus, Aboriginal Tribes, and Christians, 138 millions, and the Muhammadans, 45 These make up the 199 millions in British India millions In the Feudatory States there appear to have 1881 at been 51 millions of Brahmans and Rapputs, 461 millions of lower caste Hindus and Aboriginal Tribes, and 5 millions of Muhammadans, -making up the 56; millions in Feudatory India in 1881 The aboriginal element of the population was chiefly returned as low caste Hindus Only 43 millions were separately registered as non-Aryans, or Aborigines in and 13 millions in the Leudstory States British India making 63 millions for all India in 1881

Planof his volume in dealing with the Indian Races are their bistory

The following chapters first treat of each of these four classes separately, namely the non Aryan or so-called aboriginal tribes the Aryan immigrants from the north, the mixed population or Hindus and the Muhammadans These are the four elements which make up the present population aistory, as a loosely connected whole, after they had been pounded together in the mortar of Muhunmadan conquest, will next be traced A narrative of the events by which the English nation became inswerable for the welfare of this vast section of the hamon family, will follow Linally, it will be shown how the British Government is trying to discharge its solemn responsibility and the administrative mechanism will be explained which has knit to either the discordance rices of India into a great pacific I mpire

The two races of pre-historic India

Our earliest glimpses of India disclose two races striggling for the soil. The one was a fair skinned people, which had lately entered by the north western passes, a people of ARYAN, literally 'noble, lineage speaking a stately language, worship ping friendly and powerful gods. The other was a race of a lower type, who had long dwelt in the land, and whom the lordly new-comers drove back before them into the mountains, or reduced to servitude on the plains. The comparatively pure descendants of these two races were in 1872 nearly equal in numbers, total 33½ millions—the intermediate castes, sprung chiefly from the ruder stock, make up the mass of the present Indian population.

## CHAPIFR III

### THE NON-ARYAN RACES

THE present chapter treats of the lower tribes, an obscure The Novpeople, who, in the absence of a race-name of their own, may ARYANS or Aboribe called the non Aryans or Aborigines They have left no gines written records, indeed, the use of letters, or of any simplest hieroglyphs, was to them unknown The sole works of their hands which have come down to us are rude stone circles, and the upright slabs and mounds, beneath which, like the primitive Kistvaenpeoples of Europe, they buried their dead From these we builders only discover that, at some far-distant but unfixed period, they knew how to make round pots of hard thin earthenware, not inelegant in shape that they fought with iron weapons, and wore ornaments of copper and gold Coans of Imperial Rome have been dug up from their graves Still earlier remains prove that, long before their advent, India was peopled as far as the depths of the Central Provinces, by tribes unacquainted with the metals, who hunted and warred with polished flint Flint nes and other deftly-wrought implements of stone, similar to weapons those found in Northern Europe. And even these were the successors of yet ruder beings, who have left their agate knives and rough flint weapons in the Narbada valley. In front of this far-stretching background of the early Metal and Stone Ages, we see the so-called Aborigines being beaten down by the newly-arrived Aryan race

The struggle is commemorated by the two names which the The Non-victors gave to the early tribes, namely, the Dassus or 'enemies,' Aryans as and the Dásas, or 'slaves' The new-comers from the north by the prided themselves on their fair complexion and their Sanskrit Aryans word for 'colour' (varni) came to mean 'race' or 'caste' Their earliest poets, 3000 years ago, praised in the Rig-Veda their bright gods, who, 'slaving the Dassus, protected the Aryan man' The They tell us of their 'stormy detties, who rush on like furious 'Black skin bulls and scatter the black-skin' The sacrificer gave thanks to his god for 'dispersing the slave bands of black descent,'

Flatnosed

Raw-

The Demons of the Arvin race

More croused non Aryan ribeand for sweeping away 'the vile Dasyan colour' Moreover, the Aryan, with his finely-formed features, loathed the squat Mongolian faces of the Aborigines. One Vedic singer speaks of them as 'noseless' or flat-nosed, while another praises his own 'beautiful-nosed' gods. Indeed, the Vedic hymns abound in scornful epithets for the primitive tribes, as 'disturbers of sacrifices' 'gross feeders on flesh,' 'raw eaters,' 'lawless,' 'not-sacrificing,' 'without gods,' and 'without rites'. As time went on, and these rude tribes were driven back into the forest, they were painted in still more hideous shapes, till they became the 'monsters' and 'demons' of the Aryan poet and priest Their race name Dasvu, 'enemy,' thus grew to signify a devil, as the old Teutonic word for enemy (still used in that sense in the German femil) has become the English 'fiend

Nevertheless, all of them could not have been savages We hear of wealthy Dasyus, and even the Vedic hymns speak of their 'seven castles' and 'ninety forts'. In later Sanskrit literature the Arvans make alliance with aboriginal princes and when history at length dawns on the scene, we find some of the most powerful kingdoms of India ruled by dynastics of non tryin descent. Nor were they devoid of religious rites, or of cravings after a future life. 'They adorn' says an ancient Sanskrit treatise,1 'the bodies of their dead with gifts with raiment, with orn iments imagining that thereby they shall attain the world to come These ornaments are the bits of bronze, copper, and gold which we now dig up from beneath their rude stone monuments. In the Sanskrit epic which narrates the advance of the Arvans into Southern India, a non-Arvin chief describes his race is 'of fearful swiftness, unyielding in battle, in colour like a dark blue cloud 12

The non Ayans as tuey are. Let us now examine these primitive peoples, not is portrayed by their enemies 3000 years ago, but as they exist at the present day. Thrust back by the Aryans from the plains, they have lain hidden away in the recesses of the mountains, like the remains of extinct animals which palaeontologists find in hill caves. India thus forms a great museum of races, in which we can study man from his lowest to his highest stages of culture. The specimens are not fossils or dry bones, but living communities, to whose widely diverse conditions we have to adapt our administration and our laws.

<sup>1</sup> Chandogy a Upanishad, viii 8 5, Muir v Sanskrit Texts, ii 396

<sup>-</sup> Kamayana (ed Gorresio), in 25 15

Among the rudest fragments of mankind are the isolated The Andaman islanders in the Bay of Bengal The old Arab and Andaman islanders European voyagers described them as dog-faced man-eaters The English officers sent to the islands in 1855 to establish a Settlement, found themselves surrounded by naked cannibals of a ferocious type, who daubed themselves when festive with red earth, and mourned in a suit of olive-coloured mud They used a noise like criing to express friendship or joy, bore only names of common gender, which they received before birth, and which therefore had to be applicable to either sex, and their sole conception of a god was an evil spirit, who spread disease For five years they repulsed every effort at intercourse with showers of arrows, but our officers slowly brought them to a better frame of mind by building sheds for them near the British Settlement, where these poor beings might find shelter from the tropical rains, and receive medicines and food

The Anamalai Hills, in Southern Madras, form the refuge Anamalai of a whole series of broken tribes Five hamlets of long haired. hillmen wild looking Puliars were found living on jungle products, mice, or any small animals they could catch, and worshipping demons The Mundavers shrink from contact with the outside world, and possessed no fixed dwellings, but wandered over the innermost hills with their cattle, sheltering themselves under little leaf sheds, and seldom remaining in one spot more than a year The thick lipped, small bodied Kaders, 'Lords of the Hills,' are a remnant of a higher race. These hills, now almost uninhabited, abound in the great stone monuments (kistvaens and dolmens) which the primitive tribes erected over their The Nairs, or aborigines of South-Western India, still The Nurpractise polyandry, according to which one woman is the wife of several husbands, and a man's property descends not to his own but to his sister's children. This system also appears among the Himalay in tribes

In the Central Provinces, the aboriginal races form a large Nonproportion of the population In certain Districts, as in the Arvan State of Bastar, they amounted in 1872 to three-fifths of the of the inhabitants I heir most important race, the Gonds, have made Central some advances in civilisation, but the wilder tribes still cling The to the forest, and live by the chase. Some of them are Gonds reported to have used, within our own times, flint points for their arrows The Marias wield bows of great strength, which they hold with their feet while they draw the string with both hands A still wilder tribe, the Maris, fled from their grass-built

Maris

huts on the approach of a stranger Once a year a messenger mong the came to them from the local Rajá to take their tribute, which consisted chiefly of jungle products. He did not, however, enter their hamlets, but beat a drum outside, and then hid himself The shy Maris crept forth, placed what they had to give in an appointed spot, and ran back into their retreats

The Juangs or Leaf wearers' of Orașsa Hill 5 nies

(jovern ment

Farther to the north-east, in the Tributary States of Orissa, there is a poor tribe, 10,000 in 1872, of Juángs or Patuas, literally the 'leaf-wearers,' whose women wore no clothes The only covering on the females consisted of a few strings of bends round the waist, with a bunch of leaves tied before Those under British influence were, in 1871, and behind clothed by clothed by order of the Government, and their Chief was persuaded to do the same work for others The English officer called together the clan, and after a speech, handed out strips of cotton for the women to put on. They then passed in single file, to the number of 1900, before him, made obeisance to him and were afterwards marked on the forehead with vermilion as a sign of their entering into civilised Finally, they gathered the bunches of leaves which had formed their sole clothing into a heap and set fire to it It is reported however that many of the Juling women have since relapsed to their foliage attire

1 relic of the Strue Age

Tuang dwellings.

This leaf-wearing tribe had no knowledge of the metals till quite lately, when foreigners came among them, and no word existed in their own language for iron or any other metal But their country abounds in flint weapons, so that the Juangs form a remnant to our own day of the Stone Age 'Their huts,' writes the officer who knows them best, 'are among the smallest that human beings ever deliberately constructed as They measure about 6 feet by 8. The head of the ducllings family and all the females huddle together in this one shell, not much larger than a dog kennel. The boys and the young men of the village live in a building apart by themselves, and this custom of having a common abode for the whole male south of the hamlet is found among many aboriginal tribes in distant parts of India

Hima'ayan iribes

Proceeding to the northern boundary of India, we find the slopes and spurs of the Himalayas peopled by a great variety of rude tribes. Some of the Assam hillnich have no word for expressing distance by miles nor any land measure, but reckon the length of a journey by the number of quids of tobacco or betel leaf which they chew upon the way As a rule, they are ficree, black, undersized, and ill fed. They eked out a wretched

subsistence by plundering the more civilised hamlets of the Assam valley, a means of livelihood which they have but slowly given up under British rule Some of the wildest of them. like the independent Abars, are now engaged as a sort of irregular police, to keep the peace of the border, in return for a yearly gift of cloth, hoes, and grain Their very names bear witness to their former wild life One tribe, the Akas of Assam, is divided into two clans, known respectively as 'The Akas of eaters of a thousand hearths,' and 'The threves who lurk in the Assam cotton field?

Many of the aboriginal tribes, therefore, remain in the same More early stage of human progress as that ascribed to them by the advanced Vedic poets more than 3000 years ago But others have made Aryan great advances, and form communities of a well-developed triles type It must here suffice to briefly describe two such races, the Santals and the Kandhs who inhabit the north-eastern edge The Santáls have their home among of the central plateau the hills which abut on the Ganges in Lower Bengal Kandhs live 150 to 350 miles to the south, among the highlands which look down upon the Orissa delta and Madras coast

The Santals dwell in vilinges in the jungles or among the The mountains, apart from the people of the plains numbered about a million in 1872, and give their name to a large District, the SANTAL PARGANAS, 140 miles north west of Calcutta. Although still clinging to many customs of a hunting forest tribe, they have learned the use of the plough and settled down into skilful husbandmen. Each hamlet is governed by its own head-man, who is supposed to be a Santal descendant of the original founder of the village, and who is village assisted by a deputy head man and a watchman. The boys of men. the hamlet have their separa e officers, and are strictly con trolled by their own head and his deputy till they enter the married state. The Santals know not the cruel distinctions of Hindu caste, but trace their tribes, usually numbering seven, to the seven sons of the first parents. The whole village feasts, hunts, and worships together and the Santal had to take his wife, not from his own tribe, but from one of the six others. So strong is the bond of race, that expulsion from No castes, the tribe was the only Santal punishment A hemous criminal but strong tribal was cut off from fire and water' in the village, and sent forth feeling alone into the jungle Minor offences were forgiven upon a public reconciliation with the tribe, to effect which the guilty one provided a feast, with much rice beer, for his clansmen.

The six Santal ceremonies

The chief ceremonies in a Santál's life, six in number, vary in different parts of the country, but are all based upon this The first is the admission of the strong feeling of kinship newly-born child into the family,—a secret rite, one act of which consists in the father placing his hand on the infant's head and repeating the name of the ancestral dcity. I he second, the admission of the child into the tribe, is celebrated three or five days after birth,—a more public ceremony, at which the child's head is shaved, and the clansmen drink beer ceremony, or admission into the race, takes place about the fifth year, when all friends, whatever may be their tribe, are invited to a feast, and the child is marked on his right arm with the Santal spots I he fourth consists of the union of his own tribe with another by marriage, which does not take place till the young people can choose for themselves At the end of the ceremony, the girl's clanswomen pound burning charcoal with the household pestle, in token of the breaking up of her former family ties, and then extinguish it with water, to signify the separation of the bride from her clan The Santals respect their women, and seldom or never take a second wife, except for the purpose of obtaining an heir The fifth ceremony consists of the dismissal of the Santal from the race, by the solemn burning of his body after death. The sixth is the reunion of the dead with the fathers, by floating three fragments of the skull down the Damodar river (if possible), the sacred stream of the race

han all relicion

Santal marriages

> The Santal had no conception of bright and friendly gods, such as the Vedic singers worshipped. Still less could be imagine one omnipotent and beneficent Deity, who watches over Hunted and driven back before the Hindus and Muhammadans, he did not understand how a Being could be more powerful than himself without wishing to harm him What, said a Santal to an eloquent missionary, who had been discoursing on the Christian God-what if that strong One should cat me?' Nevertheless, the earth swarms with spirits and demons, whose ill-will he tries to avert His religion consists of nature-worship, and offerings to the ghosts of his ancestors, and his rites are more numerous even than those of the Hindus. First, the Race god, next, the Iribe god of each of the seven clans, then the Family god, requires in turn his oblation. But besides these, there are the spirits of his forefathers, river-spirits, forest spirits, well demons, mountain demons, and a mighty host of unseen beings, whom he must keep in good humour. He seems also to have borrowed from the Hindus some rites of sun worship. But his own gods

fribe god, ramilygod, Liemons

dwell chiefly in the ancient sál trees which shade his hamlets Them he propitiates by offerings of blood, with goats, cocks, and chickens If the sacrificer cannot afford an animal, it is with a red flower, or a red fruit, that he draws near to his gods In some hamlets, the people dance round every tree, so that they may not by evil chance miss the one in which the villagespirits happen to be dwelling

Until nearly the end of the last century, the Santals were The San the pests of the neighbouring plains Regularly after the tal- under British December harvest, they sallied forth from their mountains, rule plundered the lowlands, levied black-mail, and then retired with their spoil to their jungles But in 1789, the British Government granted the proprietary right in the soil to the landholders of Bengal under the arrangements which four years later became the Permanent Settlement every landholder tried to increase the cultivated area on his estate, now become his own property. The Santals and other wild tribes were tempted to issue from their fastnesses by high wages or rent free farms 'Every proprietor,' said a London newspaper, the Morning Chronicle, in 1792, 'is collecting hus They come bandmen from the hills to improve his lowlands' The English forth from the hills officers found they had a new race to deal with, and gradu ally won the highlanders to peaceful habits by grants of land and 'exemption from all taxes' They were allowed to settle disputes 'among themselves by their own customs,' and they were used as a sort of frontier police being paid to deliver up any of their own people who committed violent crimes criminals, after being found guilts by their countrymen, were handed over for punishment to the Engush judge. Santals guned confidence in us by degrees, and came down in great numbers within the fence of stone pillars, which the British officers set up in 1832 to mark off the country of the hill people from the plans

The Hindu money lender soon made his appearance in their The San settlements, and the simple hillmen learned the new luxury tals sink into debt of borrowing Our laws were gradually applied to them, and to the before the middle of this century most of the Santal hamlets Hindus were plunged in debt. Their strong love of kindred prevented them from running away and the Hindu usurers reduced them to a state of practical slavery, by threatening the terrors of a distant jail. In 1848, three whole villages threw up their clearings, and fled in despur to the jungle. In June 1855, the southern Santals started in a body, 30,000 strong, with their bows and arrows, to walk 140 miles to Calcutta and

Santal rising, 1855

lay their condition before the Governor-General At first they were orderly, but the way was long, and they had to live Robberies took place, quarrels broke out between them and the police, and within a week they were in armed rebellion The rising was put down, not without mournful bloodshed, and their wrongs were carefully inquired into A very simple form of administration was introduced, according to which their village head-men were brought into direct contact with the English officer in charge of the District, and acted as the representatives of the people. Our system of justice and government has been adapted to their primitive needs, and the Santals have for years been among the most prosperous of the Indian races

The

The Kandhs literally 'The Mountaineers,' a tribe about handhs or 100,000 strong in 1872, inhabit the steep and forest-covered ranges which rise inland from the Orissa delta, and the Madras Districts of Ganjam and Vizagapatam They form one of a group of non-Aryan races who still occupy the position assigned to them by the Greek geographers 1500 years ago. Before that early date, they had been pushed backwards by the advancing Aryans from the fertile delta which lies between the mountains One section of the Kandhs was completely and the sea broken up, and has sunk into landless low castes among the Arvan or Hindu communities at the foot of the hills. section stood its ground more firmly and became a peasant militia holding grants of land from the Hindu chiefs in return A third section fell back into the fastfor military service nesses of the mountains, and was recognised as a wild but free It is of this last section that the present chapter treats

race

Breaking ip of the

Kandh pa'ri archal govern ment

The Kandh idea of government is purely patriarchal. family is strictly ruled by the father. The grown up sons have no property during his life, but live in his house with their wives and children, and all share the common meil prepared by the grandmother The clan consists of a number of families, sprung from a common father, and the tribe is made up in like manner from a number of clans who claim descent from the same ancestor The head of the tribe is usually the eldest son of the patriarchal family, but if he be not fit for the post he is set aside, and an uncle or a younger brother appointed. He enters on no undertaking without calling together the heads of clans, who in their turn consult the heads of families

Kandh wars and punish ments.

According to the Kandh theory of existence, a state of war might lawfully be presumed against all neighbours with

whom no express agreement had been made to the contrary Murders were punished by blood-revenge, the kinsmen within Blood a certain degree being one and all bound to kill the slayer, revenge unless appeased by a payment of grain or cattle. The man who wounded another had to maintain the sufferer until he recovered from his hurt. A stolen article must be returned. or its equivalent paid, but the Kandh twice convicted of theft was driven forth from his tribe, the greatest punishment known to the race Disputes were settled by combat, or by the ordeal of boiling oil or heated iron, or by taking a solemn oath on an ant-hill, or on a tiger's claw, or a lizard's skin When a house-father died, leaving no sons, his land was parcelled out among the other male heads of the village, for no woman, nor indeed any Kandh, was allowed to hold land who could not with his own hand defend it.

The Kandh system of tillage represented a stage half-way Kandh between the migratory cultivation of the ruder non-Aryan agricultribes and the settled agriculture of the Hindus They did not, on the one hand, merely burn down a patch in the jungle, take a few crops off it, and then move on to fresh clearings Nor, on the other hand, did they go on cultivating the same fields from father to son. When their lands showed signs of exhaustion, they deserted them, and it was a rule in some of their settlements to change their village sites once in fourteen years Caste is unknown, and, as among the Sintals, marriage between relations, or even within the same tribe, is forbidden 1 Kandh wedding consisted of forcibly Kandh carrying off the bride in the middle of a feast. The boys marriages by Cupfather paid a price for the girl, and usually chose a strong ture one, several years older than his son. In this way, Kandh maidens were inarried about fourteen. Kindh boys about ten The bride remained as a sery int in her new father-in laws house till her boy-husband grew old enough to live with her generally acquired a great influence over him and a Kandh may not marry a second wife during the life of his first one, except with her consent

The Kandh engaged only in husbandry and war, and despised Serfs of all other work But attached to each village was a row of hovels village inhabited by a lower race, who were not allowed to hold land, to go forth to battle, or to join in the village worship poor people did the dirty work of the hamlet, and supplied families of hereditary weivers, blacksmiths, potters, herdsmen, and distillers. They were kindly treated, and a portion of each feast was left for them. But they could never rise in the

social scale. No Kandh could engage in their work without degradation, nor eat food prepared by their hands. They can give no account of their origin, but are supposed to be the remnants of a ruder race whom the Kandhs found in possession of the hills when they themselves were pushed backwards by the Aryans from the plans

Kandh human sacrifices

The Kandhs, like the Santals, have many deities, race gods, tribe gods, family-gods, and a multitude of malignant spirits and But their great divinity is the Earth-god who repre-Twice each year, at sents the productive energy of nature sowing time and at harvest, and in all seasons of special calamity, the Earth god required a human sacrifice (meriah) of providing the victims rested with the lower rice attached Brahmans and Kandhs were the only to the Kandh village classes exempted from sacrifice, and an ancient rule ordained that the offering mist be bougit with a frice Men of the lower race kidnapped the victims from the plains, and a thriving Kandh village usually kept a small stock in reserve, to meet sudden demands for atonement. The victim, on being brought to the hamlet, was welcomed at every threshold daintily fed, and kindly treated till the fatal day arrived was then solemnly sacrificed to the Earth god, the Kandhs shouting in his dying ear 'We bought you with a price, no sucrests with us" His flesh and blood were distributed among the village lands

The victims

The

The kardba under bottsh rule

Human sactifices abil shed

In 1835, the Kandhs passed under our rule, and these rites had to cease The proud Kandh spirit shrank from compulsion but after many tribal councils, they agreed to give up their stock of victims as a valuable present to their new suzerain Care was taken that they should not procure fresh ones kidnapping of victims for human sacrifice was declared a capital offence, and their priests were led to discover that goats or buffaloes did quite as well for the Farth god under British rule as human sacrifices Until 1835, they consisted of separate tribes, always at war with each other and with the world But under able English administrators (especially Campbell, Macpherson, and Cadenhead), human sacrinees were abolished. and the Kandhs were formed into a united and peaceful race (1837-45) The British officer removed their old necessity for tribal wars and family blood feuds by setting himself up as a central authority He adjusted their intertribal disputes, and punished heinous crimes Lieutenant Charters Macpherson, in particular, won over the more troublesome clans to quiet industry, by grants of jungle tracts, of little use to us, but a

I he race won over to peacetal to lastry

paradise to them, and where he could keep them well under his eye He made the chiefs vain of carrying out his orders by small presents of cattle, honorific dresses, and titles enlisted the whole race on his side by picking out their best men for the police, and drew the tribes into amicable relations among themselves by means of hill-fairs He constructed roads. and taught the Kandhs to trade, with a view to 'drawing them from their fastnesses into friendly contact with other men' The race has prospered and multiplied under British rule

Whence came these primitive peoples, whom the Aryan Origin of invaders found in the land more than 3000 years ago, and who the non-Aryan are still scattered over India, the fragments of a pre-historic tubes world? Written annals they do not possess Their oral traditions tell us little, but such hints as they yield, feebly point Non to the north They seem to preserve dim memories of a time Aryan traditions when their tribes dwelt under the shadow of mightier hill ranges than any to be found on the south of the river plains of Bengal 'The Great Mountain' is the race-god of the Santals, and an object of worship among other tribes Indeed, the Gonds who numbered 11 inillion in the heart of Central India in 1872, have a legend that they were created at the foot of Dewalagiri peak in the Himalavas I'll lately, they buried their dead with the feet turned northwards, so as to be ready to start again for their ancient home in the north

But the language of the non Arvan races, that record of a Non nation's past more enduring than rock inscriptions or tables of Arvan brass, is being slowly made to tell the secret of their origin It already indicates that the early peoples of India belonged to The three three great stocks, known as the Tibeto Burman, the Kolarian, non Aryan and the Dravidian

The first stock, or Tibeto-Burman tribes cling to the skirts (t) The of the Himalavas and their north eastern offshoots crossed over into India by the north eastern passes, and in some pre historic time had dwelt in Central Asia, side by side with the forefathers of the Mongolians and the Chinese Several of the hill languages in Eastern Bengal preserve Chinese terms, others contain Mongolian Thus the Nagas in Assam still use words for three and water which might almost be understood in the streets of Canton 1

1 The following are the twenty principal languages of the Tibeto Burman group -(1) Crehrii or Bodo, (2) Gaio, (3) Tipura or Mrung, (4) Tibetan or Bhutia, (5) Curung, (6) Murmi, (7) Newar, (8) Lepcha, (9) Miri, (10) Aka, (11) Mishmi dialects, (12) Dhimal, (13) Kanawari dialects, (14) Mikir, (15) Singpho, (16) Naga dialects (17) Kuki dialects, (18) Burmese.

(2) The Kolarians

(3) The Dravidians The Kolarians, the second of the three non-Aryan stocks, appear also to have entered Bengal by the north eastern passes. They dwell chiefly in the north, and along the north-eastern edge, of the three-sided table-land which covers the southern half of India. The Dravidians, or third stock, seem, generally speaking, on the other hand, to have found their way into the Punjab by the north-western passes. They now inhabit the southern part of the three sided table-land, as far down as Cape Comorin, the southernmost point of India. It appears as if the two streams, namely the Kolarian tribes from the north-east and the Dravidians from the north-west, had converged and crossed each other in Central India. The Dravidians proved the stronger broke up the Kolarians and thrust aside their fragments to east and west. The Dravidians then rushed forward in a mighty body to the south

Their con vergence in Central India.

The Ko' arrans broken up It thus came to pass that while the Dravidians formed a vast mass in Southern India, the Kolurians survived only as isolated tribes, so scattered as to soon forget their common

(19) Khien, and (20) Manipuri 'I is impossible writes Mr Brandieth, to give even an approximate number of the speakers included in this group, as many of he languages are either across the fron ier or only proact a short distance into our own territory. The langinges included in this group have not, with perhaps one or two excitors, both a cerebral and a new row or consonants, I ke the South Indian languages, some of there have assirated form of he surds, but not of the smants, others have as irrated form of both All the twenty calcuts lave words in comm n, especially numerals and projouns, and also some resent lances of grammar. In comparing the resembing words, the differences between then consist of en ess in any modification of the foct syllable than in various id attors to the root. Thus in Burmese we have na "car," Tibe an, rna a, Majar, na lef New ir, nai pon, Dhimal, na hatton, Kiranti diane, na fro, na rei na fi ik, Na, i lunguages, te na ro. tena rang, Manipuri, nilm, Kupai, kani Sak, ekim na khu and con It can herdly be contact that such additions as these to monosyllabic roots are principally determinative sellables for the jurpose of distinguishing between what would otherwise have been monosyllabic words having the same sound These exterminatives are generally affixed in the languages of Nepal and in the Dhimid language, prefixed in the Lepcha Ligarge, and in the languages of Assam of Maniper, and of the Chittagong and Arakan Hills Words are also distinguished by difference The tones are generally of two kinds, described as the abrupt or on at, and the pausing or heavy. It has been remarked that those languages which are most given to adding other syllables to the root make the least t e of the tones, and, zice zersu, where the tones most prevail the least recourse is had to determinative syllables This and the following qu mons, from Mr L L Brandreth, are condensed from his valuable paper in the Journal of the Royal Assutic Society, New Series, vol x (1577), 141 1-32

origin We have seen one of the largest of the Kolarian races. the Santáls, dwelling on the extreme eastern edge of the threesided table-land, where it slopes down into the Gangetic valley The Kurkus, a broken Kolarian tribe, inhabit a patch of country about 400 miles to the west. They have for perhaps thousands of years been cut off from the Santáls by mountains and pathless forests, and by intervening races of the Dravidian and Aryan stocks Fhe Kurkus and Santals have Scattered no tradition of a common origin, yet at this day the Kurkus Kohrian speak a language which is little clse than a dialect of Santali fragments The Swars, once a great Kolarian tribe, mentioned by Pliny and Ptolemy, are now a poor wandering race of woodcutters in Northern Madras and Orissa Yet fragments of them have lately been found deep in Central India, and as far west as Raputana on the other side. The Juangs are an isolated non-Aryan remnant among an Aryan and Uriva-speaking population I hey have forgotten, and disclaim, any connection with the Hos or other Kolarian tribes. Nevertheless, their common origin is attested by a number of Kolarian words which they have unconsciously preserved i

The compact Dravidians in the south, although in after days

1 The n ne principal languages of the Kolarian group are—(1) the San al (2) Mundair 3 Ho (4 I humij, (5 Kerwa '6 Kharria, 7) Juang (8) Kurku, and perhaps (6) the Savar Some of hem, however, are separa ed The Kolarian Creup of languages, writes only by dialectical differences Mr Lrandreth, has both the cerebral and dental row of le ters, and all o aspirated forms, which last according to Caldwell, did no belong to early Distributed There is also a set of four sounds which are certain peculiar to San ali called by Skiefserr semi-censonar and which when to I med by a vowel, me changed respectively rato nd . tien er of no na is animate and manimate and satisfinguished by difference of pronounby difference of suffix of a quantum, nown in the genitive relation, and ha the gender being denoted by the verl. As ms inces of the genitive suffix we have in Santali in a newon int son, but in cere in a house There is no distinction of sex in the pronours, but of the orimate and informate gender. The dialects generally agree in using a shor ferm of the third personal pronoun sufficed to denote the number dial in l plural, of the noun and short ferms of all the pe sonal propous are added to the verb in certain positions to express both number and person both as regards the subject and object if of the an nate gender, the manimate gender being indicated by the omission of these suitives. No other group of languages, apparently has such a legical classifier ion of its nouns as that shown by the genders of loth the South Indian groups. The genuine in the Kolarian group of the full personal pronouns is used for the posses sive pronoun, which again takes all the post positions, the genitive relation being thus indicated by the genuive sufus twice repeated. The Kolarian languages generally express gramma ical relations by suffixes, and add the post positions directly to the root, without the intervention of an

The compact Dra vidians of Southern India;

Their off

subdued by the higher civilisation of the Aryan race which pressed in among them, were never thus broken into fragments 1 Their pure descendants consist, indeed, of small and scattered tribes, but they have given their language to 28 millions of people in Southern India A theory has been started that some of the islands in the distant Pacific Ocean were peopled noots pervious settlements in India, or from an earlier common source Bishop Caldwell points out that the aboriginal tribes in Southern and Western Australia use almost the same words for I thou, he, we you, etc. as the Dravidian fishermen on the Madras coast and resemble in other ways the Madras hill tribes, as in the use of their national weapon the boomerang The civilisation and literature which the Dravidians developed in Southern India will be described in a later chapter on the Indi n vernaci 'ars

> of lique form or genitive or other suffix. They have with the Dravidian in having inclusive and exclusive firms for the plural of the first personal pronoun in using a relative parties, a instead of a relative pronoun, in the position of the governing word, and in the possession of a true causal form of the verb. They have a could which the Dravidians have not but they have no negative viace. Counting a by twenties insected of by tenis in the Dravidian. The Soi of verb occording to Skrefsrud, has 23 tenses, and for every tense two forms of the participle and a cerund?

B he Caldwell recognises twelve of finet Dravi an languages -1 Taril (2) Ma avalum (5) Teluge, (4) Kingres 5 July (6) Kudugu, (") Tour, is Korn, 9: Con 1, (10) Kanah (11) Union (1. Rajmahal In the Drave are stone, which We benefit of there is a intronel and an irra innal gender of the tous which is dis saished in the plant of the nouns, and a medime to the stription of a by offixes which appear to le fragmenton from a la corre fon my ran and ha the agree mert of the verb with the norm the gander of the verb being expressed by the pronominal suffices. To give an instance of verbal gender, we have ir Tamil, fr in the 100' c; "to de 7 m, "he (rational) d i restational cut and del man in a man male del they the ramonal of the series of a "they the true make did," the full pronouns being arm, "he, arm "he 'm, "it 'a ar, "they," azer, " they " I've dis me ion of gerder though it exists in most of the Dravidian languages is not a ways carried out to the extent that it is in Tamil In Tolugu, Gond, and Kar lle it is preserved in the plural, but in the engular the fen intre rational to in reed in the grational gender In Gord, the gend ri fur her marked by the near in the genitive relation taking a different suffer, according to the number and gender of the noun on which it depends. In Urron, the fermion rational is an irely merged n the ura i mal gender, with the exception of the pronoun, which preserves h di tinetien beween reforal and arriver d in the plaint, thus, as, "he,' referring to a god or a mon ad she 'or "it, referring to a soman or an irrational object. But ar, "they applies to both men and w men, abra, "they, to treationals only the ritional gender, besides I call being s, includes the celest all and informal deities, and it is further

The following is a list of 142 of the principal non-Aryan List of languages and dialects, prepared by Mr Brandreth for the Royal non Asiatic Society in 1877, and classified according to their gram-lan matical structure Mr Robert Cust has also arranged them in guages another convenient form, according to their geographical habitat

# TABLE OF THE NON ARYAN LANGUAGES OF INDIA.1

DRAVIDIAN GROUP	Dravidian Group-continued
Tamil	Yerukala
Malayalam	Gadaba (Kolarian?)
Telugu (Kanarese	KOIARIAN GROUP
Badaga	Santalı
Fulu	( Mundarı
Kudugu or Coorg	Ho or Larka Kol
I oda	Bhumij
Kota	Korwa
Gond dialects	Kharria
(Malado	Tuang
Raj	( kun
Maria	/ Kurku
Kandh or Ku	Mehto
Uraon or Dhangar	Savara
Kajmahali or Maler	
Miscellineous I'm'cc s	THEID BURNIN GROUP
\ Nat une	I ( Kachari or Bod)
(Acem	Mech
Auci	/ He, i
47 11 4 4	***) *

sub-divided, in senie of the languages but in the singular only, in o musculine and feminine. The grammaical r la ions in the Dravidian are centrally expressed by a flace. Many nouns have an ordique form, which is a remarkable character stic of the Dravitan group stid, with the majority of noun-the post positions are added directly to the nominative form. Other features of this group are—the frequent u e of formatives to specialize the meining of the root he absence of relative pronouns and the use instead of a relative participie which is usually formed from the ordinary participle by the same suffix is that which Dr. Caldwell considers as the oldest sign of the genitive relation, the review we preceding the substantive, of two sulstantives, the determining, receding the determined, and the verb being the last member of the sentence. There is no true dual in the Dravidian languages. In the Dravidian languages there are two forms of the plural of the pronoun of the first person one including the other excluding, the person addressed. As regards the verbs, there is a negative voice but no passive voice and there is a causal form (aldwell's second edition of his gient work, the C " " i Gran n'ar of the Drawthan Languages (Fit buer 1875), forms in use'f an epoch in that department of human knowledge Mr Beames' Comanier Grammar of the Modern Arian languages of Initi (1" i'ner, 1872) has lad the foundation for the accurate study of North Incian speech. Colonel Dalton's Ethi ology of Benga' (Calcutta, 1872) and Sir George Campbell's Specimens of the I an univer of India (Bengal Secretariat Press, 1874), have also shed new and valuable light on the questions involved

<sup>1</sup> Brockets refer to dialects that are very closely related, † to languages beyond the circle of the Indian languages (Searce of a ron next fage)

Tibeto Burman Group—cor tunu t	Tibeto Burman Group-continued
G iro	( Thado
Pani Koch	{ I ushat
Deort Chutin	( Hallam
Lipura or Mrung	Manipuri
II ( Tibetan or Bhutia	\ Maring
II { Tibetan or Bhutia { Sarpa	(Khoib i
( Lhopa or Bhut im	Kupui
Changlo	Tingkhul
Twin	Luhupa
III \ Gurun.	Khungui
( Murmi	l hadang
l hal sin Newar	Champhung
(Palm	Киротс 1 ікліпі
Morar	Andro and Sengman
Magar IN I epch	(burel
V Daphla	Anal and Namfau
Min	XVIII (Kumi
Abar	/ Kami
bhutia of Lo	Mra
VI Aka	i banjogi or I ungkhe
VII Mishmi dialecis	(1 ml ho
Chu tha c	Shendu or Li
Taxing or D 2 u	<b>∽</b> nh
iti, u	Kiri
VIII Dhim d	VIV Kuen din'ects
IX Kanawar diale	Sau
(Mi. v Tilar la i	$b_{S}(u)$
' Tilar ka i	hed k i en
1 Sume u	P <sub>r</sub>
X V Kira i'i	Lou
/ Limbu	1/1/2 1
Sunw i	An a Gr
Isrami	/ 11 / 11
( hep ) asu	Hisam Hisaruig
Kismi	tinki
M Nagadaka	t M in il
Nam in A 71/111 1	† Thacku
Banti I fior	ffler, i
A Marian	
V Tal'un,	Kux
/ Vincun	KHA
XII Naga errect	Kl i
Khari	
S Nau vm	1 \1
1 In, a	1 11
1 tota	primition of Hai
XIII Naga chlec	I ro
Angam	, whim
Kengma	Mon
) Arun_	Khimit
1 Aut ha	UAR II
I is in or Katen Maram	†1 n Mow or Chinese Shan
\I\ \\Inkir	31
// Singpho	Mox Axin
( ltp.	Mon
VI Barmese	tkambojan
NII Kuki dialeci	†Anamesc
Khyeng	†Paloung
, 0	

We discern, therefore, long before the dawn of history, Recapitumasses of men moving uneasily over India, and violently the non pushing in among still earlier tribes They crossed the snows Aryan of the Himalayas, and plunged into the tropical forests in races search of new homes Of these ancient races, fragments now exist almost in exactly the same stage of human progress as they were described by Vedic poets more than 3000 years ago Some are dying out, such as the Andaman islanders, among whom in 1869 only one family had as many as three children Others are increasing like the Santals, who have doubled themselves under British rule But they all require special and anxious care in adapting our complex administration to their primitive condition and needs faken as a whole, and including certain half-Hinduized branches, they numbered 17,627,758 in 1872, then about equal to three quarters of the population of England and Wales. But while the bolder or more isolated of the aboriginal races have thus kept themselves apart, by far the greater portion submitted in ancient times to the Aryan invaders, and now make up the mass of the Hindus

The following table shows the distribution of the aboriginal Distributions throughout British India in 1872. But many live in tion of aboriginal Native States, not included in this enumeration, and the in India Madras Census of 1872 did not distinguish aborigines from in 1872 low-caste Hindus. Their total number throughout all India (British and Leudatory) probably exceeded 20 millions in 1872.

## Iborginil Tries and Seri Hindus ed 1' vigines in 1872

(Madras Presidency and the Feudatory 5 ates not included)

Bengal,	11 116,883
Assam	1,490,555
North Western Provinces,	577 674
Oudh,	90,490
Punjab	959,720
Central Provinces,	1,009 8,5
Berar,	163 039
Coorg,	42 510
british Burma,	1,004 991
Bombay,	711 702
	17 027,758

As already stated, the Census of 1881 adopted a classification Abong nes which fails to clearly distinguish the aboriginal elements in the in 1881 Indian population. In the North-Western Provinces, Oudh,

Not separately returned and the Punjab, which returned an aggregate of nearly 1} millions of aboriginal or non Aryan castes or tribes in 1872, no separate return of the aboriginal or non-Aryan element was made in 1881 It is merged by the enumerators in the returns of the Hindu low castes The same process has affected the returns of other Provinces In Madras, for example, 27 castes formerly included in the list of aboriginal tribes, were transferred to the Hindu section of the population. In Bengal, the Census officers explain that the non-registration of the aboriginal element is in some cases due to radical differences in the system upon which the eastes, and especially the sub-divisions of castes were classified in 1872 and in 1881. In the North-Western Provinces and Oudh, the special officer states that his system of classification 'is not compatible with the modern doctrine which divides the population of India into Arvan and aborigin il

N + c m nor ar a for 1872 and 1881

Him t. z ing te i cencie Under these circumstances it would be misleading to attempt a comparison between the returns of the iboriginal or non-Arvan population in 1872 and in 1881. On the one hand, there can be no doubt that the aboriginal castes and tribes are in many parts of the country, tending towards Hinduism, and that many of them, as they rise in the scale of civilisation, lose their identity in the Hindu community. On the other hand, it is evident that the decreased returns of the aboriginal tribes and castes in 1881 are not entirely, or indeed chiefly due to this process. It would be erroneous, therefore, to infer that the balance of 124 millions between the 171 millions of aborigines returned for British India in 1872 and the  $4\frac{1}{4}$  minimals nominally returned in 1881, had become Hindus

A Hinduring process is going on both among the aboriginal low eastes in Hindu Provinces, and among the aboriginal tribes who border on such Provinces. But the apparent disappearance of nearly 13 millions of aborigines between 1872 and 1881 is due, not so much to this Hinduring process, as to differences in the system of classification and registration adopted by the Census officers. That the disappearance of the Indian aborigines is apparent and not real, can be proved. The birth rate among some of the aboriginal races is unusually high and, with exceptions, the aboriginal tribes and castes are numerically increasing, although they are partially inerging their separate identity in the Hindu community.

In Bengal and Assam, the aboriginal races are divided into

nearly 60 distinct tribes 1 In the North-Western Provinces, Their 16 tribes of aborigines were enumerated in the Census of 1872 principal races in In the Central Provinces they numbered 13 millions (1872), the 1872 ancient race of Gonds, who ruled the central table-land before the rise of the Marathás, alone amounting to 11 millions British Burma, the Karens, whose traditions have a singularly Jewish tinge, numbered 330,000 in 1872, and 518,294 in 1881

In Oudh, the nationality of the aboriginal tribes has been Crushed buried beneath waves of Rajput and Muhammadan invaders tribes For example, the Bhars, formerly the monarchs of the centre and east of that Province and the traditional fort-builders to whom all ruins are popularly assigned, were stamped out by Ibráhím Sharki of Jaunpur, in the 15th century The Gaulis or ancient ruling race of the Central Provinces, the Ahams of Assam, and the Gonds, Chandels, and Bundelas of Bundelkhand,2 are other instances of crushed races. In centres of the Arvan civilisation, the aboriginal peoples have been pounded down in the mortar of Hinduism, into the low castes and out-castes on which the social fabric of India rests 1 few of them, how (april ever, still preserve their ethnical identity as wandering tribes clanof jugglers, basket weavers, and fortune tellers. Thus the Nats, Bedivas, and other gipsy clans are recognised to this div as distinct from the surrounding Hindu population

The aboriginal races on the plains have supplied the Aboriginal hereditary criminal crasses anke under the Hindus, the criminal tribes on Muhammadans and the British Formerly organized robber the plains communities, they have, under the stricter police of our days, sunk into petty pilferers. But their existence is still recosnised by the Criminal Tribes Act passed so lately as 1871, and still enforced within certain localities of Oudh and Northern India

The non Arran hill races, who appear from Vedic times down Predators wards as marauders, have at length ceased to be a disturbing hill races element in India. But many of them figure as predatory clans in Muhammadan and early British history They sallied torth from their mountains at the end of the autumn harvest pillaged and burned the lowland villages and retired to their fastnesses lulen with the booty of the plains. The measures

1 Among them may be noted the Santals \$50,000 ander direct British administration, total about a milition in 1572. Kols 300,000. Uraons or Dhangars, 200 000 and Mundas, 175 000-wi hin British territory. In Assau-Cacharis, 200,000, Khasis, 95 000 These figures all refer to

2 See for the origin of the Bundelas, Mr J Beames R cer of the Nor h Wistern Provinces, vol 1 p 45, etc (1869)

by which these wild races have been reclaimed, form some of the most honourable episodes of Anglo Indian rule land's Hill-Rangers in the last century and the Bluls and Mhaus in more recent times, are well-known examples of how marauding races may be turned into peaceful cultivators and loyal soldiers. In equally salutary transformation has taken place in many a remote forest and hill tract of India firm order of British rule has rendered their old plundering life no longer a possible one, and at the same time has opened up to them new ou lets for their energies. A similar vigilance is now being extended to the predators tribes in the Nitive States The reclimation of the wild Moghins of Central India, and their settlement into appeultural communities has been effected by British officers within the past five years

Charge et

Inc. hill and forest takes differ in character from the the ton Aven tamer population of the plans. The rauthfulness study loyalty and a certain joy is bravely almost amounting to playfulness appeal in a special manner to the English mind There is searcely a single administrator who has ruled over them for any length of time without finding his heart driwn to them and leaving or record his benef in their capabilities for good. I ast the traditional tenderness of the Indian Civil Service to the people should weaken the testimony of such w thesses it may be safe to quote only the words of soldiers with reference to the tribes with which each was specially acquainted

T'e ron Arven bill tribe- 15 ~ i dier-

'They are fa thful truthful and attached to their superiors, writes General Briggs 'ready at all times to lay down their lives for those they serve and remarkable for their indomit able courage. These qualities have always been displayed in our service The aborigines of the Karnatik were the sepoys of Cive and of Coote. I ten companies of the same stock joined the former great captum from Bombas, and Edped to fight the battle of Plassey in Bengal, which laid the foundation of our Indian Empire. They have since distinguished themselves in the corps of pioneers and engineers, not only in India, but in Avi, in Afglianistan, and in the celebrated defence of Jalalabad An unjust prejudice against them grew up in the native armies of Midras and Bombay, produced by the feelings of contempt for them existing among the Hindu and Muhammad in troops. They have no prejudices themselves, are always ready to serve abroad and embirk on board ship, and I believe no instance of mutiny has ever occurred among them.' Since General Briggs wrote these

sentences, the non-Aryan hill races have supplied some of the bravest and most valued of our Indian regiments, particularly the gallant little Gúrkhas

Colonel Dixon's report, published by the Court of Directors, Colonel portrays the character of the Whair tribes with admirable minute on the He dilates on their 'fidelity, truth, and honesty,' their Whairs determined valour, their simple loyalty, and an extreme and almost touching devotion when put upon their honour Strong as is the bond of kindred among the Mhairs, he vouches for their fidelity in guarding even their own relatives as prisoners when formally entrusted to their care. For centuries they had been known only as exterminators, but beneath the considerate handling of one Englishman, who honestly set about understanding them, they became peaceful subjects and welldisciplined soldiers

Sir James ()utram when a very young man, did the same Outram's good work for the Bhils of KHANDLSH He made their chiefs mork imong he his hunting companions, formed the wilder spirits into a Bhil Bhils battalion, and laid the basis for the reclamation of this formerly intractable race (See also The Dangs, Imperial Gazetteer of India )

Every military man who has had anything to do with the aboriginal races acknowledges, that once they admit a claim on their allegiance nothing tempts them to a treacherous or disloyal 'The fidelity to their acknowledged chief, wrote Captain Fidelity of Hunter 'is very remarkable, and so strong is their attach- the hll races ment, that in no situation or condition, however desperate, can they be induced to betray him. If old and decrepit they will convey him from place to place to sive him from his enemies Their obedience to recognised authority is absolute Colonel 1 od relates how the wife of an absent chiertain procured for a British messenger safe conduct and hospitality through the densest forests by giving him one of her husbands arrows as a token The very officers who have had to act most sharply against them speak most strongly, and often not without a noble regret and self-reproach, in their favour was not war, Major Vincent Jervis writes of the operations against the Santals in 1855. They did not understand rielding, as long as their national drums beat, the whole party would stand, and allow themselves to be shot down They were the most truthful set of men I ever met' Ethnical

distribu

We have seen that India may be divided into three regions—tion of Indian the Himalayas on the north, the great River Plains that stretch races

southward from their foot, and the Three sided Table-land which slopes upwards again from the River Plains, and covers the whole southern half of India. Two of these regions, the Himalayas on the north, and the Three sided Table land in the south, still afford retreats to the non-Arvan tribes. The third region, or the great River Plains, became in very ancient times the theatre on which a nobler race worked out its civilis from

## CHAPTER IV

## THE ARYANS IN ANCIENT INDIA

I HIS nobler race belonged to the ARYAN or Indo Germanic THE stock, from which the Brahman, the Rajput, and the English ARYAN man alike descend. Its earliest home, visible to history, was in Central Asia From that common camping-ground, certain branches of the race started for the east, others for the west One of the western offshoots founded the Persian kingdom. another built Athens and Lacedanion, and became the Hellen c nation, a third went on to Italy and reared the City on the Its Seven Hills, which grew into Imperial Rome A distant European colony of the same race excavated the silver ores of prehistoric Spain, and when we first eatch a sight of ancient England we see an Arvan settlement fishing in watt's canoes, and working the tin mines of Cornwall Meanwhile other I. brunches of the Arran stock had gone forth from the primitive Eastern home in Central Asia to the east Powerful bands found their branches way through the passes of the Himalavas into the Punjab, and spread themselves, chiefly as Brahmans and Rapputs, over India.

We know little regarding these Arvan tribes in their early The camping ground in Central Asia From words preserved in Iryans in the languages of their long separated descendants in Europe their primitive and India, scholars infer that they roumed over the grassy home. steppes with their cattle making long halts to rear crops of grain. They had timed most of the domestic animals were acquainted with a hard metal probably iron,1 and silver,2 understood the arts of weaving and sewing, wore clothes, and ate cooked food. They had the hard, lite of the temperate zone, and the feeling of coid seems to be one of the earliest common remembrances of the eastern and the western branches of the race. Ages afterwards, when the Vedic singers in hot

<sup>1</sup> Sanskitt ajas, non or, m a more general sense, metal, including gold but not copper in Sanskrit. Latin, aes aeris copp i, bronze, Gothic, ais, eisam, old German, er, iron modern German eisen

<sup>2</sup> Sanskrit, kharjura, silver, Latin, arger tum, Greek, appures, a > con

India prayed for long life, they still asked for 'a hundred cunters' To this day the November rice in the tropical delta of the Ganges is called the haimantik (cf Latin hiems) or crop of the 'snowy' season

languages merely varieties of Aryan speech

The forefathers of the Greek and the Roman, of the Englishman and the Hindu, dwelt together in Asia, spoke the same tongue, worshipped the same gods The languages of Europe and Indian and India, although at first sight they seem wide apart, are merely different growths from the original Aryan speech is especially true of the common words of family life names for father, mother, brother, sister, and widow (Sanskrit, zidhaza), are the same in most of the Arvan languages, whether spoken on the banks of the Ganges, of the Tiber, or of the Thus the word daughter (Sanskrit, duhitri), which occurs in nearly all of them, has been derived from the Sanskrit root duh, 'milk,' and preserves the memory of the time when the daughter was the little milkmaid in the primitive Aryan household

Indo I uropean words

The words preserved alike by the European and Indian branches of the Ar an race as heirlooms of their common home in Western Central Asia, include most of the terms required by a pastoral people who had already settled down to the cultivation of the more easily reared crops. Their domestica ed animals are represented by names derived from the same root, for cattle sheep, wool goats, swine, dogs, horses, ducks, geese, also mice, their agricultural life, by cognate words for corn (although the particular species of the cereal varied), flax or hemp, ploughing and grinding, their implements, by cognate terms for copper or iron, cart or waggon, boat, helm, their household economy and industries by words from the same roots for sewing and weaving, house, garden, yard, also for a place of refuge, the division of the year into lunar months, and several of the numerals

Common rigin of re izions

The ancient religions of Lurope and India had a similar They were to some extent made up of the sacred r mopean and Indian stories or myths which our common ancestors had learned while dwelling together in Central Asia. Certain of the Vedic gods were also the gods of Greece and Rome, and the Deity is still adored by names derived from the same old Arvan root (div. to shine, hence The Bright One, the Indian Deta, Latin Deus, or Divinity), by Brahmans in Calcutta, by the Protestant clergy of England, and by Catholic priests in Peru

The Indo

The Vedic hymns exhibit the Indian branch of the Aryans the march, on their march to the south east, and in their new homes

The earliest songs disclose the race still to the north of the Khaibar Pass, in Kábul, the latest ones bring them as far as Their victorious advance eastwards through the intermediate tract can be traced in the Vedic writings almost step by step One of their famous settlements lay between the two sacred rivers, the Saraswati, supposed to be the modern Sarsutí near Thánesar in the Punjab, and the Drishadvatí, or Ghaggar, a day's march from it This fertile strip of land, not more than 60 miles long by 20 broad, was fondly remembered by the Indo-Aryans as their Holy Land (Brahma varita), 'fashioned of God, and chosen by the Creator' As their numbers increased, they pushed eastwards along the base of the Himálayas, into what they afterwards called the Land of the Sacred Singers (Brahmarshi-desha) Their settlements and in included by degrees the five rivers of the Punjab, together with their new the upper course of the Jumna and perhaps of the Ganges

Here the Vedic hymns were composed, and the steady supply of water led the Aryans to settle down from their old state of wandering pastoral tribes into communities of Their Vedic poets praised the rivers which Function husbandmen enabled them to make this great change—perhaps the most of the important step in the progress of a race 'May the Indus', Rivers. they sang, 'the far-famed giver of wealth, hear us, (fertilizing our) broad fields with water' The Himálavas, through whose offshoots they had reached India, and at whose southern base they long dwelt, made a lasting impression on their memory The Vedic singer praised 'Him whose greatness the snows ranges, and the sea, and the aerial river declare' In all its long wanderings through India the Aryan race never forgot its Recollecnorthern home. There dwelt its gods and holy singers, and tions of there eloquence descended from heaven among men while notthern beyond the mountain wall by the paradise of deities and home heroes, where the kind and the brave for ever repose

The Rig Veda forms the great literary memorial of the The Riz early Aryan settlements in the Punjab The age of this Veda venerable hymnal is unknown. The Hindus believe without evidence, that it existed 'from before all time, or at least from Insufacient 3101 years BC, nearly 5000 years ago European scholars evidence for its sup have inferred from astronomical dates that its composition poed was going on about 1400 b C. But these dates are themselves dates 3101 given in writings of modern origin, and might have been 1400 calculated backwards. We know, however, that the Vedic BC (1) religion had been at work long before the rise of Buddhism in the 6th century B c The antiquity of the Rig-Veda although

less of great anti quity

not to be dogmatically expressed in figures, is abundantly established The earlier hymns exhibit the Aryans on the northwestern frontiers of India, just starting on their long journey Neverthe- Before the embassy of the Greek Megasthenes, at the end of the 4th century BC, they had spread at least to the verge of the Gangetic delta, 1500 miles distant. At the time of the Periplus, are 70 AD, the southernmost point of India was apparently a sent of their worship. A temple to the queen of the god Siva stood on Cape Comorin, before the end of the first Christian century and the inferences of European scholarship point to the composition of at least some of the Vedic psalms at a period not later than twelve to sixteen centuries before the commencement of our era.

Inspira \ eda

The Kig Veda. hymns,

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1017

W1 : Wbarna .

The Brahmans declare that the Vedic hymns were directly tion of the insured by God Indeed, in our own times, the young Theistic Church of Bengal which rejects Brahmanical teaching, was split into two sects on the question of the divine authority of the Veda The hymns seem to have been composed by certain fam lies of Rishis or psalmists, some of whose names are preserved. The Rig Vega is a very old collection of 1017 of these short lyrical poems, chiefly addressed to the gods, and containing to 580 verses. They show us the Arvans on the banks of the Indus, divided into various tribes, sometimes at war with each other sometimes united against the black-skinned' aborigines. Caste, in its later sense, is Each father of a family is the priest of his own hig-Veus, household. The chieftain acts as full er and priest to the tribe but at the greater festivals he chooses some one specially learned in holy offerings to conduct the sacrince in the name of the people. The chief, although hereditary, seems to have been partly elected and his title of Vis pair, 'I ord of the Settlers,' survives in the old Persian Vis paiti, and as the Lithuanian Wicz patis in central Europe at this day. Women enjoyed a high position, and some of the most beautiful hymns were composed by ladies and queens. Marriage was held sacred. Husband and wife were both 'rulers of the house' (dampate), and drew near to the gods together in prayer. The burning of widows on the husbands' funeral pile was unknown and the verses in the Veda which the Brahmans afterwards distorted into a sanction for the practice, have the very opposite meaning 'Rise, woman,' says the sacred text to the mourner, 'come to the world of life Come to us I how hast fulfilled thy duties as a wife to thy husband'

The Aryan tribes in the Veda are acquainted with most of

the metals. They have blacksmiths, coppersmiths, and gold-Aryan smiths among them, besides carpenters, barbers, and other civilisation in the artisans They fight from chariots, and freely use the horse, Veda although not yet the elephant, in war They have settled down as husbandmen, till their fields with the plough, and live in villages or towns But they also cling to their old wandering life, with their herds and 'cattle pens' Cattle, indeed, still form their chief wealth—the coin (Latin, pecunia) in which payments or fines are made, and one of their words for war literally means 'a desire for cows' They have learned to build 'ships,' perhaps large river-boats, and have seen or heard something of the sea Unlike the modern Hindus, the Aryans of the Veda ate beef, used a fermented liquor or beer, made from the soma plant, and offered the same strong meat and drink to their gods I hus the stout Aryans spread eastwards Spread of through Northern India, pushed on from behind by later the Aryan-arrivals of their own stock, and driving before them, or reducing to bondage, the earlier black skinned races marched in whole communities from one river valley to another, each house-father a warrior, husbandman, and priest with his wife, and his little ones and cattle

These free hearted tribes had a great trust in themselves The gods and in their gods. I ike other conquering races, they believed of the that both themselves and their deities were altogether superior to the people of the land and to their poor, rude objects of worship Indeed, this noble self confidence is a great aid to the success of a nation Their divin ties—leas, literally The Shining Ones,' from the Sanskiit foet die 'to shine'-were the great powers of nature. They adored the Father-heaven Draush pitar in Sinskrit, the Dies fiter or Jupiter of Ronic, the Leus of Greece the I ow German Duus, and, through the old French god-demon, Dus ins probably the Deuce of English slung, together with Mother Futh and the Fricom passing Sky, Varuna in Sanskrit, Viarus in Latin Ouranos The Stramey's, or two children of Indra's watch dog, the messengers of death, have been compared with the Greek Hermeias, the conductor of the dead. Such common ideas and names penetrate deeply into the mythology of the ancient world, although they have sometimes been evaggerated Juj iter Feretrus, for whom the Romans invented conflicting derivations, may be really the I rated han or destroyer of the old Aryan demon Vritra On the coins of the Republic, Juno Sospita is represented with a skin and horns over her General Cunningham suggests that her epithet represents the Sanskrit

Saspatni (Sasi), a name for the moon, so called from the marks on the moon being supposed to resemble a hare (sasa)

Influence of the runy season on Aryan mytho logy

Indra, or the Aqueous Vapour that brought the precious rain on which plenty or famine depended each autumn, received the largest number of hymns. By degrees, as the settlers reduced more and more keenly the importance of the periodical rains to their new life as husbandmen, he became the chief of the Vedic gods. The gods do not reach unto thee, O Indra, or men thou overcomest all creatures in strength? Açni the God of Fire (I atin 15mis) ranks next to Indra in the number of lymns in his honour as the friend of man, the guide of the people, the lead and giver of wealth

Indra n Agn

Judging, indeed, from the preponderance of the invocaons to Agni, and from the position which the corresponding deity holds in Iranian mythology it would appear as it Agni and not Indra had been the chief god of the race. while the Indian and old Persian branches still dwelt Among the cold heights and on the uplands of Central Asia, to the north west of the Himilayas Heat was the great factor of fertil ty the giver of human comfort, and the ripener of the crops. When the eastern ofishoots of the Arrans descended upon the plans of India they found, as they advanced southward, that heat was an element of product veness which r h be taken for granted a constant factor in the husbandry of the Indu- and Jumna valleys. Here it was upon moisture rather than on heat that their harvest deper ded. To the right of their line of march across the five rivers of the Punjals, a rather narrow tract stre ched to the foot of the Him that is with an ample runfail, now averaging 35 inches a veir. But on the broad plains to their left, the water supp v was less abundant and more capri-At the present day the tract immediately to the south of the Aryan route receives only 20 to 30 incles per annum, di minishing through successive belts of rainful down to 10 inches

Moist c

Ar gie she to Im ra

lr 'r ti tar i mper As the Aryan immigrants spread south, therefore, it was no longer so necessary to pray for heat, and it became more necessary to pray for moisture. Again, the heat giving god, without being discredited, became less important, and receded in favour of Indra, the run bringing deity. In the settlements of the Punjah, Indra thus advanced to the first place among the Vedic divinities. He is the cloud compeller, dropping bountiful showers, filling the dried up rivers from the Hima layas and bringing the rain storms. His voice is the thunder with his spear of lightning he smites open the black clouds, and rends the black bodies of the demons who have drunk up the

wished-for rains He makes the sun to shine forth again will sing of the victories of Indra, of the victories won by the God of the Spear,' chanted the Rig-Vedic psalmist. 'On the mountains he smote the demon of drought (Ahi), he poured out the waters and let the river flow from the mountains like calves to cows, so do the waters hasten to the sea ' 'Thou hast broken open the rain-prisons 1 rich in cattle. The bonds of the streams hast thou burnt asunder '2

As the Aryans pushed forward into the middle and lower Indragives valley of the Ganges, they found themselves in a region of placetothe Triad, copious rainfall brought by the unfailing monsoons The rainstorms of Indra thus became less important His waterspouts, although well worth praying for in the Punjab, evidently belonged to an inferior grade of divine energy than that which presided over the irresistible, majestically ordered advance of the periodical rains in Bengal Indra, the Cloud-Compeller. shared in his turn the fate of Agni, the God of Heat, and gave way to three deities on a scale commensurate with the vaster of Brahma, forces of nature in the Lower Gangetic valley We shall see how Sixa the abstract but potent conception of Divine energy embodied in the Brahmanical Triad of the Creator Preserver, and Destroyer took the place alike of Agni and of Indra, and of the other Vedic gods But, meanwhile Indra, the Giver of Rain was the most important deity to the Arvan settlers in the Punish He stands forth in the Veda as the foremost Shining One

The Maruts were the Vedic Storm Gods, 'who make the Other rocks to tremble who tear in pieces the forest Ushas, 'the Vedic gods High-born Dawn (Greek Los) shines upon us like a young wife, rousing every living being to go forth to his work Aswins, or Fleet Outriders of the Dawn, are the first rays of sunrise, I ords of Lustre The Solar Orb (Suriva Savitri). the Wind (Vayu), the Sunshine or Friendly Div (Mitra) the animating fermented juice of the Sacrificial Plant (Soma), and many other Shining Ores are invoked in the Veda in all, about thirty three gods, 'who are eleven in heaven, eleven

The terrible blood-drinking deities of modern Hinduism are

on earth, and eleven dwelling in glory in mid-air

<sup>1</sup> Literally, 'Thou hast broken the cave of Vritra the demon who imprisons the rain and causes drought, with whom Indra is constantly waging victorious war

<sup>-</sup> The Rig Vedic attributes of Indra are well summarized by Professor Max Duncker, Ancient History of India, pp 47-49 (cd 1881), following Roth and Benfey, and are detailed with completeness by Muir, 'Sanskrit Texts, pp 76-139, vol v (1872)

loving deities of scarcely known in

The blood scarcely known in the Veda Buffaloes are indeed offered, and one hymn points to a symbolism based on human sacrifices, Hinduism an early practice apparently extinct before the time of the Vedic singers. The great Horse-Sacrifice (Aswamedha) seems, the Veda, in some of its aspects, a substitution for the flesh and blood of a man But as a whole, the hymns are addressed to bright, friendly gods Rudra, who was destined to become the Siva of the Hindus, and the third person or Destroyer in their Triad is only the god of Roaring Tempests in the Veda Vishnu, the second person or Preserver in the Hindu Triad is but slightly known to the Vedic singers as the deity of the Shining Firmament, while Brahmá the first person or Creator, has no suparate existence in their simple hymns. The names of the dreadful Mahadeva. Durga, Kali, and of the gentler but intensely human Krishna and Rama, are alike unknown

Attitude of the Vedic singer to his gods

The Aryan settlers lived on excellent terms with their bright They asked for protection with an assured conviction that it would be granted 'Give me cows or land or long life in return for this hymn or offering ' slay my enemy, scatter the black skin and I will sacrifice to thee -such is the ordinary frame of mind of the singer to his gods at the same time, he was deeply stirred by the glory and mystery of the earth and the heavens. Indeed, the majesty of nature so filled his mind that when he praises any one of his Shining Gods he can think of none other for the time being. and adores um as the Supreme Ruler Verses of the Veda may be quoted declaring each of the greater deities to be the One Supreme 'Neither gods nor men reach unto thee O Indra,' Soma is 'king of heaven and earth, the conqueror of all.' To Varuna also it is said, 'I nou art lord of all, of heaven and earth, thou art king of all those who are gods and of all those who are men' Agni is likewise addressed as the mightiest and as the most beloved of the gods "No one can approach thy darting, strong, terrible flames burn thou the evil spirits, and every enemy' The more spiritual of the Vedic singers, therefore, may be said to have worshipped One God, although not One Alone

Higher сивсер tions of the Deity in the Veds

Some beautiful souls among them were filled not only with the splendours of the visible universe, but with the deeper mysterics of the Unseen, and the powerlessness of man to search out God.

A ledic himn

'In the beginning there arose the Golden Child the one born lord of all that is. He established the earth and this sky Who is the God to whom we shall offer our sacrifice?

'He who gives life, he who gives strength, whose command all the Bright Gods revere, whose shadow is immortality, whose shadow is death. Who is the God to whom we shall offer our sacrifice?

'He who, through his power, is the one king of the breathing and awakening world He who governs all, man Who is the God to whom we shall offer our and beast. sacrifice?

'He through whom the sky is bright and the earth firm, he through whom the heaven was established, nay, the highest heaven, he who measured out the light and the air Who is the God to whom we shall offer our sacrifice?

'He who by his might looked even over the water-clouds, he who alone is God above all gods. Who is the God to whom we shall offer our sacrifice ?1

The yearning for rest in God, that desire for the wings of a 'The dove, so as to fly away and he at rest, with which noble hearts Better have ached in all ages, breathes in several exquisite hymns of the Rig-Veda 'Where there is eternal light, in the world where the sun is placed —in that immortal, imperishable world, place me, O Soma! Where life is free, in the third heaven of heavens, where the worlds are radiant -there make me immortal! Where there is happiness and delight, where joy and pleasure reside, where our desires are attained,—there make me immortal '2

Nor was the sense of sin, and the need of pardon absent The sense from the minds of these ancient psalmists As a rule, an of sin and honourable understanding seems to have existed between the lorgive-Vedic sacrificer and his bright god the god being equitably ness pledged to the fulfilment of the sacrificer's prayer in return for the offering, although the wisest might leave it to Indra himself to decide what was best to bestow. But even the cheerful worshippers of the Veda at times felt deeply the sinfulness of sin, and the fear of the sins of the father being visited upon the children 'What great sin is it, O Varuna,' says a hymn of the Rig-Veda, 'for which thou seekest to slay thy worshipper and friend?' 'Absolve us from the sins of our fathers and from those which we committed in our own persons' 'It was not our own doing that led us astray, O Varuna, it was

<sup>1</sup> Rig Veda, x 121, translated by Prof Max Muller, Hist Anc Sinsk Ist p 569 Chips, vol 1 p 29 (ed 1867)

<sup>2</sup> Rig Veda, ix 113 7, Max Muller's translation

Prayers for pardon necessity (or temptation), wine, anger, dice, or thoughtlessness. The stronger perverts the weaker—Even sleep bringeth sin'! 'Through want of strength, thou strong and bright god,' says another hymn to Varuna, 'have I gone wrong—have mercy, almighty, have mercy. I go along trembling like a cloud driven before the wind—have mercy, almighty, have mercy. Through want of power (to do right) have I transgressed, O bright and mighty god—have mercy, almighty have mercy. Whenever we men, O Varuna, commit an offence before the heavenly host, whenever we break the law through thoughtlessness, have mercy almighty have mercy.

Primitive Arvan burral

The very ancient Arvans in Central Asia buried their dead, although cremation seems also to have been resorted to Irin the custom of burial eventually gave place to that of exposing the corpse on a mountain to the birds of heaven, a custom still practised in the Parsi Towers of Silence at Bombay and elsewhere We have seen that Agm, god of heat appears to have been the chief deity of the Arvan race in Iran and fire was regarded by the ancient Persian as too sacred an element to be polluted by a human corpse-Aryan settlers in India for a time retained the custom of 'Let me not O Varuna, go to the house of clay,' says one hymn of the Rig-Veda " O carth, he not too narrow for hin, says another hymn, 'cover him like the mother who folds her son in her garment 4. But in time the Indo Aryans substituted the fire for the grave and the burning of the corpse became a distinctive feature of the race, as contrasted with the ruder and more primitive peoples whom they found in the Punnab

I irning of the dead

While the aboriginal tribes buried their dead under rude stone monuments, the Arian—alike in India, in Greece and in Italy—made use of the funeral pare as the most solemn incthod of disposing of the mortal part of man. As the Indo Arian derived his natural birth from his parents, and a partial regeneration, or second birth, from the performance of his religious duties, so the fire, by setting free the soul from the body, completed the third or heavenly birth. His friends

<sup>1</sup> Kig Vela, vi 86, translated in Mun 5 Sanskrit Texts, vol v p 66 (1872

<sup>&</sup>lt;sup>2</sup> Aig Veda, vii 89. Max Mulier's becutiful tran lation is reproduced by 1 rosessor Duncker, An ient History et India, p. 53 (1881). See also Mars translation, 'Sanslatt Texts,' vol. v. p. 67 (1872).

<sup>3</sup> Rig Veda, vii 89 1 Muirs 'Sanskiit Texts, vol v p 67 (1872)

<sup>1</sup> kin Veda, x 15 Roth's rendering in Doncker, Ancient History of Intia, p 63 (1881)

stood round the pyre as round a natal bed, and commanded his eye to go to the sun, his breath to the wind, his limbs to the earth, the water and plants whence they had been derived But 'as for his unborn part, do thou, Lord (Agni), quicken it with thy heat, let thy flame and thy brightness quicken it, convey it to the world of the righteous'

For the lonely journey of the soul after its separation from Aryan the body, the Aryans, both in Asia and Europe, provided legend of faithful guides (the Saranasa Sarahari Aryans, provided King faithful guides (the Sarameyas in Sanskrit, Hermeias in Greek) Yama, or According to the Zend or old Aryan legend in Persia, Yama Death was a monarch in the old time, when sorrow and sickness were By degrees sin and disease crept into the world, the slow necessity of death hastened its step, and the old king retired, with a chosen band, from the polluted earth into a better country, where he still reigns The Indian version of the story makes Yama to be the first man who passed through death into immortality. Having discovered the way to the other world, he leads men thither He became the nekro pompos, or guide of the Aiyan dead Meanwhile his two dogs (Sarameyas)- 'black and spotted,' 'broad of nostril,' and 'with a hunger never to be satisfied'-wander as his messengers among men 'Worship with an offering King Yama, the Assembler of Men, who departed to the mighty waters, who found out the road for many '1

Several exquisite hymns bid farewell to the dead - Depart The Vedic thou, depart thou by the ancient paths to the place whither our farewell to the dead fathers have departed Meet with the Ancient Ones, meet with the Lord of Death Throwing off thine imperfections, go to thy home Become united with a body, clothe thyself in a shining form' 'Let him depart to those for whom flow the rivers of nectar Let him depart to those who, through meditation, have obtained the victory, who, by fixing their thoughts on the unseen, have gone to heaven. Let him depart to the mighty in battle, to the heroes who have laid down their lives for others, to those who have bestowed their goods on the poor' The doctrine of transmigration was unknown circle round the funeral-pile sang with a firm assurance that their friend went direct to a state of blessedness and reunion with the loved ones who had gone before 'Do thou conduct

<sup>&</sup>lt;sup>1</sup> Rig Veda, x 14 1 See Dr John Mun Sanskrit Texts, and his essay on 'Yama,' Journal of the Royal Asiati, Society, part in 1865, whence many of the above quotations are derived. See also Max Muller's essay on the 'Funeral Rites of the Brahmans,' on which the following paragraph is chiefly based

Vedic concep tions of immor tality us to heaven,' says a hymn of the later Atharva Veda, 'let us be with our wives and children' 'In heaven, where our friends dwell in bliss,—having left behind the infirmities of the body, free from lumeness, free from crookedness of limb,—there let us behold our parents and our children' 'May the watershedding spirits bear thee upwards, cooling thee with their swift motion through the air and sprinkling thee with dew' 'Bear him, carry him let him, with all his faculties complete, go to the world of the righteous Crossing the dark valley which spreadeth boundless around him let the unborn soul ascend to heaven Wash the feet of him who is stained with sin let him go upwards with cleansed feet Crossing the gloom, gazing with wonder in many directions, let the unborn soul go up to heaven'

The Aryanadvance into the Middle Land The hymns of the Rig Veda were composed, as we have seen, by the Arvans in their colonies along the Indus, and on their march eastwards towards the Jumin and upper Ganges. The growing numbers of the settlers, and the arrival of fresh Arvan titles from behind still compelled them to advance. From 'The Land of the Sacred Singers,' in the Eastern Punjab (Brahmarshi desha, ante, p. 77), Manu describes them as spreading through 'The Middle Land' (Madhva desha). This comprised the river system of the Ganges as far east as Oudh and Allahabad, with the Himalavas as its northern, and the Vindhva ranges as its southern boundary.

The

The Ganges is only twice mentioned and without special emphasis in the Rig Veda. The conquest of the Middle Land seems, therefore, not to have commenced till the close of the Rig-Vedic era. It must have been the work of many general tions, and it will be referred to when we come to examine the historical significance of the two great Sanskrit epics. Between the time when the Arvans descended from Central Asia upon the plains of the Indus and the age when they passed the Ganges, they had conquered many of the aboriginal races, left others behind on their route, and had begun to wage inter tribal wars among themselves, under rival Aryan heroes and rival Vedic priests. During this advance, the simple faith of the Rig-Vedic singers was first adorned with stately rites, and then extinguished beneath them. The race progressed from a loose confederacy of tribes into several well-knit nations, each bound together by the strong central force of kingly power, directed by a powerful priesthood, and organized on a firm basis of caste

Slow advance into the Middle Land

Whence arose this new constitution of the Aryan tribes into

nations, with castes, priests, and kings? We have seen that The Aryan although in their earlier colonies on the Indus each father was tribes organized priest in his family, yet the Chieftain, or Lord of the Settlers, into called in some man specially learned in holy offerings to kingdoms conduct the greater tribal sacrifices Such men were highly honoured, and the famous quarrel which runs throughout the whole Veda sprang from the claims of two rival sages, Vasishtha and Viswamitra, to perform one of these ceremonies The art of writing was unknown, and the hymns and sacrificial formulæ had to be handed down by word of mouth from father to son

It thus came to pass that the families who knew these Origin of holy words by heart became the hereditary owners of the priestly families liturgies required at the most solemn offerings to the gods Members of such households were chosen again and again to conduct the tribal sacrifices, to chant the battle-hymn, to implore the divine aid, or to pray away the divine wrath Even the early Rig Veda recognises the importance of these sacrifices 'That king,' says a verse, before whom marches the priest, he alone dwells well established in his own house, to him the people bow down The king who gives wealth to the priest, he will conquer, him the gods will protect' The tribesmen first hoped, then believed, that a hymn or prayer which had once acted successfully, and been followed by victory, would again produce the same results. The hymns became a valuable family property for those who had composed or learned The Rig-Veda tells how the prayer of Vasishtha pre vailed 'in the battle of the ten kings,' and how that of Viswa mitra 'preserves the tribe of the Bharats.' The potent prayer was termed brahman (from the root brih = 1 rih, to increase), and he who offered it, brahman Woe to him who despised either! 'Whosoever,' says the Rig-Veda, 'scofts at the prayer which we have made may hot plagues come upon him, may

Certain families thus came to have not only a hereditary Growing claim to conduct the great sacrifices, but also the exclusive numbers knowledge of the ancient hymns, or at any rate of the traditions of priests They naturally which explained their symbolical meaning tried to render the ceremonies solemn and imposing degrees a vast array of ministrants grew up around each of the greater sacrifices There were first the officiating priests and

the sky burn up that hater of Brahmans '1

1 The following pages are largely indebted to Professor Weber-History of Indian Literature (Trubner, 1878), -a debt very gratefully acknowledged

their assistants, who prepared the sacrificial ground, dressed the altar, slew the victims, and poured out the libations, second, the chanters of the Vedic hymns, third, the reciters of other parts of the service fourth, the superior priests, who watched over the whole, and corrected mistakes

The four Vedas.

(1) The

Rig Veda

The entire service was derived from the Veda, or 'inspired knowledge,' an old Arvan word which appears in the Latin tid-erc, 'to see or perceive,' in the Greek feudo of Homer, and ouda, 'I know' in the Old Finglish, I aut, in the modern German and English a ssen, a isdom, etc. The Rig Veda exhibits the hymns in their simplest form arranged in ten 'circles according to the families of their composers the Rishis some of the hymns are named after individual ministrels.

(2) The

Veda.

(3) The

V eda

But as the sacrifices grew more claborate, the hymns were also arranged in four collections (sannitas) or service books for the ministering priests Thus the second, or Sama Veda was made up of extracts from the Ris Veilic hymns used at the Soma sacrifice. Some of its verses stamp themselves, by their antiquated grammatical forms as older than their render ing in the Rig-Veda itself. The third or Vajir Veda consists not only of Rig-Vedic verses but also of prose sentences, to be used at the sacrifices of the New and Full Moon, and at the Great Horse Sacrifice, when 600 animals of various kinds were offered, perhaps in substitution for the earlier Man Surifice, which is also mentioned in the Yapir Veda The Yn r Veda is divided into two editions, the Black and the White Yajur both belonging to a more modern period than either the Rig or the Sama Vedas, and composed after the Arrans had spread far to the east of the Indus

105 (a)
Plack and
17) White
editions

4) The Vrha va Vedu The fourth, or Atharva Veda, was compiled from the least ancient hymns of the Rig Veda in the tenth book and from the still later sones of the Brahmans, after they had established their priestly power. It supplies the connecting link between the simple Arvan wors up of the Shining Ones exhibited in the Rig Veda, and the complex Brahmanical system which followed. It was only allowed to rank as part of the Veda after a long struggle.

The 1 str Vedas Vecome arsufficient

The four Vedas thus described, namely, the Rig Veda, the Sama, the Yajur, and the Atharva, formed an immense body of sacrificial poetry. But as the priests grew in number and power, they went on elaborating their ceremonies, until even the four Vedas became insufficient guides for them. They accordingly compiled prose treatises, called Bráhmanas, attached to each of the four Vedas, in order to more fully explain the

The Brah manas compiled

functions of the officiating priests Thus the Brahmana of the Rig-Veda deals with the duties of the Reciter of the Hymns (hotar), the Bráhmana of the Sáma-Veda, with those of the Singer at the Soma sacrifice (udgátar), the Bráhmana of the Yajur-Veda, with those of the actual performer of the Sacrifice (adhvarvu), while the Brahmana of the Atharva-Veda is a medley of legends and speculations, having but little direct connection with the Veda whose name it bears All the Srutz, or Bráhmanas, indeed, besides explaining the ritual, lay down Revealed religious precepts and dogmas Like the four Vedas, they are held to be the very Word of God. The Vedas and the Bráhmanas form the Revealed Scriptures (srutt) of the Hindus, the Vedas supplying their divinely inspired psalms, and the Brahmanas their divinely inspired theology or body of doctrine

Even this ample literature did not suffice The priests The Sutras accordingly composed a number of new works, called Sútras, or Sacred Traditions, which claborated still further their system of sacrifice, and which asserted still more strongly their own claims as a separate and superior caste. They alleged that these Sutras, although not directly revealed by God, were founded on the inspired Vedus and Branmanas and that they had therefore a divine authority as sacred traditions (smrtti) The Sutras, literally, Smrtti 'strings of aphorisms were composed in the form of short not revealed, sentences for the sake of brevity, and in order that their vast number might be the better remembered in an age when writing was little practised, or unknown. Some of them, such as their the Kalpa Sutrus deal with the ritual and sacrifices, others, subjectlike the 'Household or Grihya Sutris, prescribe the ceremonies at birth marriage, and death a still larger class of Sutras treat of the doctrines, duties, and privileges of the priests. The Sutras thus became the foundation of the whole legislation and philosophy of the Brahmans in later times. They exhibit the The Brahmans no longer as the individual sacrificers of the Vedic Brahman caste fully period, but as a powerful hereditary caste, claiming supremacy formed alike over king and people

Meanwhile, other eastes had been gradually formed the Arrans moved eastwards from the Indus, some of the warmer warriors were more fortunate than others, or received larger caste shares of the conquered lands Such famines had not to till (Kshat their fields with their own hands, but could leave that work triyas) to be done by the aboriginal races whom they subdued this way there grew up a class of warriors, freed from the labour of husbandry, who surrounded the chief or king, and were always ready for battle. It seems likely that these kinsmen

and companions of the king formed an important class among the early Aryan tribes in India, as they certainly did among the medieval branches of the race in Europe, and still do at the petty courts of India. Their old Sanskrit names, Kshattrija, Rajanja, and Rájbansi, mean 'connected with the royal power,' or 'of the royal line,' their usual modern name Rajput means 'of royal descent' In process of time, when the Aryans settled down, not as mere lighting clans, but as powerful nations, in the Middle Land along the Jumna and Ganges, this warrior class grew in numbers and in power The black races had been reduced to serfdom, or driven back towards the Himalayas and the Vindhyas, on the north and on the south of the central tract The incessant fighting, which had formed the common lot of the tribes on their actual migration eastwards from the Indus, now ceased

The cultivating caste

A section of the people accordingly laid aside their arms, and devoting themselves to agriculture or other peaceful pur suits, became the Vaisias The sultry heats of the Middle Land must have abated their old northern energy, and inclined them to repose. Those who, from family ties or from personal inclination, preferred a soldier, life, had to go beyond the frontier to find an enemy Distant expeditions of this soit could be undertaken much less conveniently by the husband man than in the ancient time, when his fields lay on the vers border of the enemy's country, and had just been wrested from it. Such expeditions required and probably developed i military class, endowed with lands, and with serfs to till the so I during the master's absence at the wars The old com panions and kinsmen of the king formed a nucleus round which gathered the more daring spirits They became in time a distinct military case

The four castes (1) Brahmans, (2) K-hat triyas, (3) Vaisyas, The Aryans on the Ganges, in the 'Middle Land,' thus found themselves divided into three classes—first, the priests, or Brahmans, second, the warriers and kings companions, called in ancient times Kshattriyas, at the present day Rájputs, third, the husbandmen, or agricultural settlers, who retained the old name of Vaisyas, from the root ris, which in the Vedic period had included the whole 'people'. These three classes gradually became separate castes, intermarriage between them was forbidden, and each kept more and more strictly to its hereditary employment. But they were all recognised as belonging to 'Twice-born,' or Aryan race, they were all present at the great national sacrifices, and all worshipped the same Bright Gods

Beneath them was a fourth or servile class, called Súdras, the

(4) Sudras

remnants of the vanquished aboriginal tribes whose lives had been spared These were 'the slave-bands of black descent.' the Dásas of the Veda I hey were distinguished from their 'Twiceborn' Aryan conquerors as being only 'Once-born,' and by many contemptuous epithets They were not allowed to be present at the great national sacrifices, or at the feasts which followed them They could never rise out of their servile condition, and to them was assigned the severest toil in the fields, and all the hard and dirty work of the village community

Of the four Indian castes, three had a tendency to increase The Brah As the Aryan conquests spread, more aboriginal tribes were mans, Kshat reduced to serfdom, as Sudras The warriors, or Kshattriyas, triyas, and would constantly receive additions from wealthy or enterprising Sudras members of the cultivating class When an expedition or increase migration went forth to subdue new territory, the whole colonists would for a time lead a military life, and their sons would probably all regard themselves as Kshattriyas ancient times, entire tribes, and at the present day the mass of the population throughout large tracts, thus claim to be of the warrior or Raiput caste Moreover, the kings and fighting men of aboriginal races who, without being conquered by the Arrans, entered into alliance with them, would probably assume for themselves the warrior or Kshattriya rank. We see this process going on at the present day among many of the aboriginal peoples. The Brahmans, in their turn, appear at first to have received into their body distinguished families of Kshattriv i descent In later times, too, we find that sections of aboriginal races were also 'manufactured' wholesale into Brahmans Unmistakeable cases of such 'manufactures' or ethnical syncretisms are recorded, and besides the upperclass agricultural Brahmans, there are throughout India many local castes of Brahmans who follow the humble callings of fishermen blacksmiths, ploughmen, and potato growers 1

The Vaisya or cultivating caste did not tend, in this manner, The to increase No one felt ambitious to win his way into it, Vaisyas diminish except perhaps the enslaved Sudras to whom any change of condition was forbidden. The Vaisyas themselves tended in early times to rise into the more honourable warrior class, and at a later period, to be mingled with the labouring multitude of Sudras, or with the castes of mixed descent many Provinces they have now almost disappeared as a distinct In ancient India, as at the present day, the three conspicuous castes were (1) the priests and (2) warriors of

<sup>1</sup> See Hunter's Orusa, vol 1 pp 239-204 (1872)

Arvan birth, and (3) the serfs or Súdras, the remnants of earlier races. The Sudras had no rights, and, once conquered, ceased to struggle against their rate. But a long contest raged between the priests and warriors for the chief place in the Aryan commonwealth

Struggie hetween priestly and Warrior castes

In order to understand this contest we must go back to the time when the priests and warriors were simply fellow tribesmen. The Brihmin caste seems to have grown out of the families of Rishis who composed the Vedic hymns, or who were chosen to conduct the great tribal sterifices after times the whole Britim in population of India pretended to trace their descent from the Seven Rishis, heads of the seven priestly families to whom the Vedic hymns were But the composers of the Vedic hymns were sometimes kings or distinguished warriors rather than priests, indeed the Veaa incif speaks if these roval Rish s (Rajarshis) When the Brahmans par roward then claim to the highest pretension rank the warnors or Ashattrivas were slow to admit it, and when the Brahmans went step farther in I declared that only members of their families could be priess or gur admission into the briestly caste the warriors seem to have disputed their retensions. In over ages the Brahmans, having the exclusive keeping of the sacred writings canced from them, as for as nossible all traces of their struggle with the Kshattrivas The Brahmans taught that their caste lad co ac forth from the mouth of God divinely orduned to the priesthood from the beginning of time. Nevertheless, the Vedic and Sanskrit texts record a long contest perhaps representing a difference in race or separate waves of Aryan migrations

of the Brihman-

Rising

mitra and Lasishtha

The quarrel between the two sizes Visa im tra and Vasishtha, which as has been mentioned runs through the whole Veda is typical of this struggle Viswamitra stands as a representative of the royal warrior rank, who claims to perform a great public sacrifice. The white robed Vasishtha represents the Brahmans or hereditary priesthood, and opposes the warrior's claim. In the end, Visw unitra established his title to conduct the sacrifice, but the Brahmans explain this by saying that his virtues and austerities won admission for him into the priestly family of Bhrigu. He this became a Brahman, and could lawfully fill the priestly office. Viswamitra serves as a typical link, not only between the priestly and the worldly castes, but also between the sacred and the profine sciences He was the legendary founder of the art of war, and his equally legendary son Susruta is quoted as the earliest authority on

These two sciences of war and medicine. Indian medicine together with music and architecture, form upa-Vedas, or subplementary sections of the divincly inspired knowledge of the **Bráhmans** 

Another famous royal Rishi, Vítahavya, 'attained the con-Other dition of Brahmanhood, venerated by mankind, by a word cases of Kshat of the saintly Bhrigu Parasu Rama, the Divine Champion of trijas at the Brahmans, was of warrior descent by his mother's side taining to Brahman-Manu, their legislator, sprang from the warrior caste, and his hood father is expressly called 'the seed of all the Kshattriyas' But when the Brahmans had firmly established their supremacy. they became reluctant to allow the possibility of even princes finding an entrance into their sacred order King Ganaka was more learned than all the Brahmans at his court, and performed terrible penances to attain to Brahmanhood the legends leave it doubtful whether he gained his desire the still more boly, but probably later, Matanga, wore his body to skin and bone by n illousand years of austernies and was held up from falling by the hand of the god Indra himself Nevertheless he could not attain to Brai manhood. Gautama Buddha, who in the 6th century before Unrist overthrew the Brahman supremacy and founded a new resignon was a prince of warrior descert, perhaps born in too late an age to be adopted into and utilized by the Bringian caste

Among some of the Awan tr bes the priests apparen is range The to establish themselves as an exclusive order Indeed, the four Lend, the castes and especially the Brannian case seem only to have focus of obtained their full development amid the pien v or the Middle Pralman I and ( Madhia disha) watered by the Jumna and the Guraes The early Arvan settlements to the west of the Indus long re mained outside the case sistem the later Arian offshoots to the south and east of the Middle I and carry ar rally carried that system with them. But in the Middle I and useit with Delia as its western capital and the great cities of Ajodhya (Odeh) and Benares on its eastern frontier, the Brahn ans area by degrees into a compact, learned, and supremely influential body, the makers of Sanskrit literature. Their language their religion and their laws, became in after times the standards aimed at throughout all India. They naturally denoused all who did Assan not submit to their pretensions and they stigmatized the other tribes beyond Aryan settlements who had not accepted their cas e system as the Brah lapsed tribes or outcasts (Vrishalis) Among the lists of such manical fallen races we read the name atterwards applied to the pale Ionians or Greeks (1 ar anas) The Brihmans of the Midd e

Land had not only to enforce their supremacy over the powerful warriors of their own kingdoms, they had also to extend it among the outlying Arvan tribes who had never fully accepted their caste system. This must have been a slow work of ages, and it seems to have led to bitter feuds.

Biahman discomfitures

There were moments of defeat, indeed when Brihman leaders acknowledged the superiority of the warrior caste 'None is greater' says the Brihad Aranvaka Upanishad, 'than the Kshattriya therefore the Brihman under the Kshattriya, worships at the royal sacrifice (rajaraya) 1. It seems likely that numbers of the Vaisvas or cultivators would take part with the Kshattrivas, and be admitted into their caste That the contest was not a bloodless one is attested by many legends especially that of Parasu Rima, or Rima of the Are' This hero, who was divinely honorired is the sixth Incarnation of Vishnu appeared on the scene after alternate massacres by Brihmans and Kshattrivas had taken place He tought on the Brahman side, and covered India with the carcases of the warnor caste Thrice seven times' says the Sanskrit coic 'did he cicar the earth of the Kshattrivas,' and so ended in favour of the Brahmans the long struggle

The Bialman su premacy i stablished

They
make a
wise use
of n

It is vain to search into the exact historical value of such legends. They suffice to indicate an opposition among the early Arvan kingdoms to the claims of the Brahmans and the mingled measures of conciliation and force by which that opposition was overcome. The Brahman caste, having established its power, made a wise use of it. From the incient Vedic times its leaders recognised that if they were to exercise spiritual supremacy, they must renounce earthly pomp. In arrogating the priestly function, they give up all claim to the royal office. They were divinely appointed to be the guides of nations and the counsellors of kings, but they could not be kings themselves. As the duty of the Sudra was to serve, of the Vaisya to till the ground and follow middle class trades or crafts, so the business of the Kshattriya was with

It is easy to exaggerate the significance of this parage, and danger is to generalize from it. The author has to thank I'rof Cowell and the late Dr. John Muir for notes upon its precise application. Weber, Hist. Int. I it p. 54 (1878), describes the rajasuja as "the confectation of the king." The author takes this opportunity of expressing his many obligations to Dr. John Muir, his first teacher in Sanskrit. Dr. Muir, after an honourable career in the Bengal Civil Service, devoted the second half of his life to the study of ancient Indian literature, and his five volumes of Original Sans brit Texts form one of the most valuable and most permanent contributions to Oriental learning made in our time.

the public enemy, and that of the Brahmans with the national gods.

While the Bráhman leaders thus organized the occupations Four of the commonwealth, they also laid down strict rules for their stages of a Brahman's own caste They felt that as their functions were mysterious life and above the reach of other men, so also must be their lives Each day brought its hourly routine of ceremonies, studies, and duties Their whole life was mapped out into four clearlydefined stages of discipline For their existence, in its full First stage religious significance, commenced not at birth, but on being The Learner invested at the close of childhood with the sacred thread of the thrahma Twice-Born Their youth and early manhood were to be spent charn) in learning by heart from some Brahman sage the inspired Scriptures, tending the sacred fire, and serving their preceptor Having completed his long studies, the young Brahman (2) The entered on the second stage of his life, as a householder When he holder married and commenced a course of family duties had reared a family, and gained a practical knowledge of the tna) world, he retired into the torest as a recluse, for the third period (3) The of his existence, feeding on roots or fruits, and practising his Recluse religious rites with increased devotion. The fourth stage was (rina that of the ascetic or religious mendicant, wholly withdrawn from fras (a) earthly affairs, and striving to attain a condition of mind (4) The which, heedless of the joys, or pains, or wants of the body, is Ascetic intent only on its final absorption into the deity The Brahman, in this fourth stage of his life, ate nothing but what was given to him unasked, and abode not more than one day in any village, lest the vanities of the world should find entrance into his Throughout his whole existence he practised a strict temperance, drinking no wine, using a simple diet, curbing the desires, shut off from the tumults of war, and his thoughts fixed on study and contemplation 'What is this world?' says a Bráhman sage 'It is even as the bough of a tree, on which a bird rests for a night, and in the morning flies away?

It may be objected that so severe a life of discipline could Brahman never be led by any large class of men. And no doubt there ideal of have been at all times worldly Brahmans, indeed, the struggle for existence in modern times has compelled the great majority of the Bráhmans to betake themselves to secular pursuits But the whole body of Sanskrit literature bears witness to the fact that this ideal life was constantly before their eyes, and that it served to the whole caste as a high standard in its two really essential features of self-culture and self-restraint.

Incidents in the history of Buddha, in the 6th century before Christ, show that numbers of Brahmans at that time lived according to this rule of life Three hundred years later, the Greek ambassador, Megasthenes, found the Brahmans discoursing in their groves, chiefly on life and death Chinese travellers, down to the roth century and, attest the survival of the Brahmanical pattern of the religious life whole monastic system of India, and those vast religious revivals which have given birth to the modern sects of Hin duism, are based on the same withdrawal from worldly affair-At this day, Brahman colleges, called tols, are carried on without fees on the old model, at Nadiva in Bengal, and elsewhere The modern visitor to these retreats can testify to the stringent self-discipline, and to the devotion to learning for its own sake, often protracted till past middle life, and sometimes by grey-haired students

Brahman rule of life

Its here ditary results on the casts

The Brahman t pc

The Brahmans therefore, were a body of men who, in an early stage of this world's history, bound themselves by a rule of life the essential precents of which were self-culture and self-As they married within their own caste, begat restraint children orly during their prime, and were not liable to lose the finest of their youth in war, they transmitted their best qualities in an ever increasing measure to their descendants The Brahmans of the present day are the result of nearly 3000 years of hereditary education and self-restraint, and they have evolved a type of mankind quire distinct from the surrounding Even the passing traveller in India marks them population out, alike from the bronze checked, large limbed, leisure loving Rapput or warrior caste of Arvan descent and from the dark-skinned, flat nosed, thick lipped low castes of non-Arvin origin, with their short bodies and bulket heads The Brahman stands apart from both tall and slim, with finely modelled lips and nose, fur complexion, high forehead, and somewhat cocoa nut shaped skull—the man of self-centred retrement He is an example of a class becoming the ruling power in a country, not by force of arms, but by the vigour of hereditary culture and temperance. One race has swept across India after another, dynasties have risen and fallen, religions have spread themselves over the land and disappeared But since the dawn of history, the Brahman has calmly ruled, swaying the minds and receiving the homage of the people, and accepted by foreign nations as the highest type of Indian mankind

The paramount position which the Brahmans won, resulted, in no small measure, from the benefits which they bestowed

For their own Aryan countrymen, they developed a noble The work language and literature The Brahmans were not only the done by priests and philosophers They were also the lawgivers, the mans for statesmen, the administrators, the men of science, and the India poets of their race Their influence on the aboriginal peoples, the hill and forest races of India, was not less important these rude remnants of the flint and bronze ages they brought in ancient times a knowledge of the metals and of the gods Within the historical period, the Brahmans have incorporated the mass of the backward races into the social and religious organization of Hinduism A system of worship is a great comfort to a tropical people, hemmed in by the uncontrolled forces of nature, as it teaches them how to propitiate those mysterious powers, and so tends to liberate their minds from the terrors of the unseen

The reflective life of the Middle Land (Madhia-desha) led Brahman the Bráhmans to see that the old gods of the Veda were in theology reality not supreme beings, but poetic fictions For when they came to think the matter out, they found that the sun the aqueous vapour, the encompassing sky, the wind and the dawn could not each be separate and supreme creators but must have all proceeded from one I irst Cause. They did not shock the religious sense of the less speculative cases by any public rejection of the Vedic deities. They accepted the old I seso eric 'Shining Ones of the Veda as beautiful manifestations of the and exo divine power, and continued to decorously conduct the sacrifices teric sides in their honour But among their own caste, the Brahmans distinctly enunciated the unity of God To the Veda, the Brahmanas, and the Sutras, they added a vast body of theological literature, composed at intervals between 800 BC and 1000 AD The Upanishads, meaning according to their great Bráhman expounder, 'The Science of God' and His' identity with the soul,' the Aranvakas, or 'Tracts for the Forest Recluse,' and the much later Puranas, or 'Traditions from of Old,'-contain mystic and beautiful doctrines inculcating the unity of God and the immortality of the soul, mingled with less noble dogmas, popular tales, and superstitions The mass of the people were left to believe in four castes, four Vedas, and many deities But the higher thinkers among the Brahmans recognised that in the beginning there was but one caste, one Veda, and one God

The old 'Shining Ones' of the Vedic singers were, indeed, Rise of the no longer suitable deities, either for the life which the Aryans post-Vedic led after they advanced into Southern Bengal, or for the country

The vast forces of nature,

in which they lived The Vedic gods were the good 'friends' of the free-hearted warring tribes in Northern India, settled on the banks of tordable streams or of not overpowering rivers In Central and South Eastern Bengal, the Brahmans required detties whose nature and attributes would satisfy profoundly reflective minds, and at the same time would be commensurate with the stunendous forces of nature amid which they dwelt. The storm gods (Maruts) of the Veda might suffice to ruse the dust whirlwinds of the Punjab but they were evidently deities on a smaler scale than those which wielded the irresistible The rivers, too had ceised to be merely cyclones of Ben\_al bount rul givers of wealth as in the north Their recumulated waters came down in floods which builed cities and drowned wrenching away the vilinges on their banks, de provinces stroving and reproducing the land with an equal balance High born Dawn the Genial and the Iriendly Dir, and the kindly but confused old groups of Vedic deities accordingly gave place to the conception of one god in his three solemn manifestations is Biolimi the Creitor, Vishnu the Pieserver, and Siva the Destroyer and Reproducer

Each of these highly e borated gods had his prototype

among the Vedic deries and they remain to this hour the tarce persons of the Hindu Triad Brahma the Creator was

too abstract an idea to be a popular god, and in a journey through India the traveller comes on only one great seat of his worship at the present day, on the maigin of the sacred lake Pt-HKAKA, near Ajmere. A single day of Brahma is

in Bergal

The HinJu Triad

Brahma

Vishia .

2114

2160 millions of man's years. Visland the Preserver, was a more useful and practical delty. In his ten meanations, especially in his seventh and eighth, as Rama, and Krishna under many names and in varied forms, he took the place of the bright Vedic gods. Siva, the third person of the Triad, embodied, as Destrover and Reproducer, the profound by imminical conception of death as a change of state and an entry into new life. He thus obtained, on the one hand, the special reverence of the mystic and philosophic sects among the brighmans, while, on the other, his terrible aspects associated him alike with the Rudra, or 'God of Roaring Tempests' of the Veda, and with the blood loving deties of the non-try in tribes. Visland and Siva, in their diverse male and femile shapes now torin, for practical purposes, the gods of the Hindu population.

Išrahman plul 150 phy The truth is, that the Aryans in India worshipped—first, as they fe ired, then as they admired and finith, as they reasoned. Their earliest Vedic gods were the stupendous phenomena of

the visible world, these deities became divine heroes in the epic legends, and they were spiritualized into abstractions by the philosophical schools. From the Vedic era downward—that is to say, during a period which cannot be estimated at less than 3000 years—the Brahmans have slowly claborated the forces and splendid manifestations of nature into a harmonious godhead, and constructed a system of behief and worship for the Indian people. They also pondered deeply on the mysteries of life. Whence arose this fabric of the visible world, and whence came we ourselves—we who with conscious minds look out upon it? It is to these questions that philosophy has, among all races, owed her birth, and the Bráhmans arranged their widely diverse answers to them in six great systems or darsanas, literally 'mirrors of knowledge'

The present sketch can only touch upon the vast body of The six speculation which thus grew up, at least 500 years before Christ daisants or schools, I he universal insoluble problems of thought and being, of mind and matter, and of soul as apart from both of the origin of evil, of the summum bonum of life, or necessity and freewill, and of the relations of the Creator to the creature are in the six schools of Brihmanical philosophy endiessly discussed

The Sankhya system of the sage Kapiia explains the visible (t) The world by assuming the existence of a primordial matter from Sankhya all eternity, out of which the universe has, by successive stages, The Yoga school of Patanjah assumes the exist- (2) The crolled uself ance of a primordial soul, arterior to the primeral matter, and Yoga holds that from the union of the two the spirit of lite (mai an The two Vedanta schools ascribe the visible world (3-4) The atma) arose to a divine act of creation, and assume an omninotent god as Venaitas the cause of the existence the continuance and the dissolu The Nyava or logical school of Gautama (5) The tion of the universe chunciates the method of irriving at truth and has special stress on the sensitions as the source of knowledge. It is usually classed together with the sixth school, the Vaiseshika, (6) The founded by the sige Kanada, which teaches the existence of a shika transient world composed of cternal atoms All the six schools had the same starting-point, ex number nihil fit. Their sages as a rule, struggled towards the same end, namely the liberation of the human soul from the necessity of existence and from the chain of future biths, by its absorption into the Supreme Soul, or primordial Essence of the universe 1

Any attempt to fuse into a few lines the vast conflicting masses of Hindu philosophical doctrines must be unsa isfactors. Objections may be taken to compressing the sub-divisions and brunching doctrines of each

Summary of Brah man religion

The Brihmans, therefore treated philosophy as a branch of religion Now the universal functions of religion are to lay down a rule of conduct for this life, and to supply some guide to the The Brahman solutions to the problems of practical religion, were self-discipline, alms, sacrifice to and contemplation of the deity. But besides the practical questions of the spiritual life religion has also intellectual problems, such as the compatibility of evil with the goodness of God, and the un equal distribution of happiness and misers in this life. Brithman philosophy exhausted the possible solutions of these difficulties, and of most of the other great problems which have since perpexed Greek and Roman sage, medieval schoolman and modern man of science The various hypotheses of Creation. Arrangement, and Development were each claborated and the views of physiologists at the present day are a return, with new lights, to the evolution theory of Kupila. His Sinkhya system is held by Weber to be the oldest of the six Brihman schools, and certainly dates from not later than 500 BC works on Relig on published in the native languages in India in 1877 numbered 1192 besides 56 on Mental and Moral In 1882, the totals had risen to 1545 on Philosophi Religion and 153 on Ment il and Moral Pl Josophy

The Br hmans had also a circle of sciences of their own

Brahman

1

Sanskrit grammai

Pan n

The Science of Language indeed, had been reduced in India to fundamental principles at a time when the grammarians of the West of Il treated it on the basis of accidental resemblances, and modern philology dates from the study of Sanskrit by European scholars Panini was the architect of Sanskrit grammar, but a long succession of grammarians must have laboured before he reared his enduring fibric The date of Panini has been assigned by his learned editor Bohtlink to about 350 b.c. Weber, reisoning from a statement made (long afterwards) by the Chinese pilgrim Hiuen Islang, sug gests that it may have been later. The grammar of Panini stands supreme among the grammars of the world, alike for its precision of statement, and for its thorough analysis of the roots of the language and of the formative principles of words. By employing an algebraic terminology it attains a sharp succinctness unrivalled in brevity, but at times enigma It arranges, in logical harmony, the whole phenomena

school into a single sentence. But space forbids a more lengthy disquisition. The foregoing paragraphs end-avour to fairly condense the accounts which H. H. Wilson, Albrecht Weber, Professor Dowson, and the Rev. L. M. Banarji give of the Six Davianas or Schools.

which the Sanskrit language presents, and stands forth as one of the most splendid achievements of human invention and industry So elaborate is the structure, that doubts have arisen whether its complex rules of formation and phonetic change, its polysyllabic derivatives, its ten conjugations with their multiform agrists and long array of tenses, could ever have been the spoken language of a people This question will be discussed in the chapter on the modern vernaculars of India

It is certain that a divergence had taken place before the Sanskrit time of Panini (350 BC), and that the spoken language, or and Prakrita bhasha, had already assumed simpler forms by the speech assimilation of consonants and the curtailment of terminals The Samskrita-bháshá, literally, the 'perfected speech,' which Panini stereotyped by his grammar, developed the old Aryan tendency to accumulations of consonants, with an undiminished, or perhaps an increased, array of inflections this highly elaborated Sanskrit the Brahmans wrote. It became the literary language of India,—isolated from the spoken dialects, but prescribed as the vehicle for philosophy, science, and all poetry of serious aim or epic digitity. As the Aryan race mingled with the previous inhabitants of the land, the spoken Prakrits adopted words of non Aryan origin and severed themselves from Sanskrit, which for at least 2000 years has been unincelligible to the common people of India The old synthetic spoken dialects, or Prakrits underwent the same decay as Latin did, into analytic vernaculars, and about the same time. The noble parent languages, alike in India and in Italy, died but they give birth to families of vernaculars which can never die

An intermediate stage of the process can be traced in the Hindu drama, in which persons of good birth speak in Pra kritized Sanskrit, and the low castes in a blusha, or patois, between the old Prakrit and the modern dialects. It is chiefly under the popularizing influences of British rule that the Indian vernaculars have become literary languages. Until the last century, Sanskrit, although as de id as Latin so far as the mass of the people were concerned, was the vehicle for all intellectual and artistic effort among the Hindus, their local ballads and the writings of religious reformers excepted. In addition, therefore, to other sources of influence, the Brahmans were the interpreters of a national literature written in a language unknown to the people

The priceless inheritance thus committed to their charge Sanskit they handed down, to a great extent, by word of mouth Partly mann scrupts

No very ancient Indian MSs.

from this cause, but chiefly owing to the destructive climite of India, no Sanskrit manuscripts of remote antiquity exist. A fairly continuous series of inscriptions on rocks pillars, and copper-plates enable us to trace back the Indian alphabets to the 3rd century PC. But the more uncient of existing Sanskrit manuscripts are only four hundred veurs old, very few have an age exceeding five centuries, and only two date as far back as 1132 and 1008 A D 1 The earliest Indian was (1008 AD) comes from the cold dry highlands of Nepal 2 In Kashmir, birch-bark was extensively used a substitute for paper also employed in India before 500 A ii and still surviving in the amulets with verses on them which hang round the neck of Hindus 3 Indeed birch birk is to this day used by some native merchants in the Simla Hills for their account books

Palm haf MSS of Jaj an

The palm-leaf was bowever the chief writing material in ancient and inediaval India. I wo Sanskrit minuscripts on this substance have been preserved in the Monasters of Horian in Japan since the year 609 x D. It seems probable that these two strips of palm-leaf were previously the property of a

520 4 )? Buddhist monk who migrated from India to China in 520 1 D 3 At any rate they cannot date later than the first half of the 6th century, and they are the oldest Sanskrit manuscripts vet discovered. They were photographed in the Anadota Oxonunsia, 1884

The Inc tan

With regard to the origin of the Indian alphabets the evi-Alphabets dence is still too undigested to safely permit of cursory state Or the two characters in which the Asoka inscriptions were written (250 a D), the northern variety or Ariano Pali, is now admitted to be of Pheenician, or at any rate of non Indian,

<sup>1</sup> Fournote 1982 to Weber's Hi ! Ind I it p 182 (1878) quoting the report of Rajen ira Lula Vi ra (1874), and Dr. Kost's let et (1875) K Cust, manote for The Imperval Guitteer of Intia assigns the year 88, A D as the date of the earliest existing S in ki t sts. it Cambridge his remains doubtful. For very in cresting information regarding the age of Indian viss see the official reports of the Search for Sanskit Manuscripts in Bengal, Bombay, and Madras, par icularly Dr (, Buliler's (extra num ber of the Journal of the hombay branch of the Keral 4 ratio Society, No arxiv A, vol. an. 1877', and Professor P. Leterson's (extra numbers of the same Journal, ali 1863, and aliv 1684)

<sup>2</sup> The present author has printed and cent to the India Office Library, for public reference, a catalogue of the 332 Sanskrit Buddhist Mss collected by Mr B H Hodgson in Nepal

<sup>3</sup> Dr Luhler's Your in Search for Sanstrit WSS, Journal Bombay A ratic Society, XXXIV A, p. 29, and footnote 1877

Anadola Oxonunua, Ary in Series, p. 64 vel i Pait III (1884) See also Part I of the volume, and pp 3, 4 of Part III

parentage The southern variety, or Indo-Páli, is believed by some scholars to be of Western origin, while others hold it to be an independent Indian alphabet An attempt has even been made to trace back its letters to an indigenous system of picture writing, or hieroglyphs, in pre-historic India.1 Quintus Curtius mentions that the Indians wrote on leaves in the time of Alexander (326 BC) 2 They do so to this hour any, Indian manuscripts on paper belong to a period anterior to the 16th century A D The earliest Indian writings are on copper or stone, the medieval ones generally on strips of palmleaves. General Cunningham possesses a short inscription, written with ink in the inside of a lid made of soapstone, dating from the time of Asoka, or 256 BC. The introduction of paper as a writing material may be studied in the interesting collection of Sanskrit manuscripts at the Deccan College, Poona

Sanskrit literature was the more easily transmitted by word of Sanskrit mouth, from the circumstance that it was almost entirely written written almost in verse. A prose style, simple and compact had grown up entirely in during the early age following that of the Vedic hymns But verse Sanskrit literature begins with the later, although still ancient, stage of Arvan development, which superseded the Vedic gods by the Brahmanical fried of Brahma, Vishnu, and Siva When Sanskrit appears definitively on the scene in the centuries preceding the birth of Christ, it adopted once and for all a rhythmic versification alike for poetry, philosophy, science law, and religion, with the exception of the Beast Fables and the almost algebraic strings of aphonisms in the Sutras Buddhist legends adnesed more closely to the spoken dialects of ancient India, prakrita bhasha and they also have retained a prose style. But in classical Sanskrit literature, prose became an arrested development the sloka or verse reigned Prose, a supreme and nothing can be clumsier than the attempts at fergotten prose in later Sanskrit romances and commentaries Prose-

<sup>&</sup>lt;sup>1</sup> By General Cunningham, Corpus In 1 + conum It 1 rru1, pp 52 et sea The attempt cannot be pronounced successful. Dr. Burnell's Program of Southern India exhibits he successive developments of the Indian alphabet. For the growth of the Indian dialects, see Mr. Beames. Comparative Grammas of the Modern Assan Languages + India Dr Rudolph Hernle's Comparative Grammar of the trul in Languages, two excellent papers, by Mr 1 L brandreth, on the Gaudian Languages, in the Journ Roy As Sec, vols x1 vn, and Nr R \ Custs In vusta and Oriental Essays, pp 144-171, Trubner, 1880 For a compendious view of the Indian alphabets, see Faulmann's Buch der Swrift, 119 158, Vienna, 1880 2 Alexander in India, hb vin cap 9, v 15

writing was practically a lost art in India during eighteen hundred years

Sanskrit dictionaries.

Sanskrit dictionaries are a more modern product than Sanskrit The oldest Indian lexicographer whose work survives, Amara-Sinha, ranked among the 'nine gems' at the court of Vikramaditia, one of several monarchs of the same name—assigned to various periods from 56 BC to 1050 AD The particular Vikramaditya under whom the 'nine gems' are said to have flourished, appears from evidence in Hinen Tsiang's travels to have lived about 500 to 550 AD. A well known memorial verse makes Amara Sinha a contemporary of Varaha-Mahara, the astronomer, 504 a D. The other Sanskrit lexicons which have come down belong to the 11th 12th, and subsequent centuries and Those centuries, indeed seem to mark an era of industry in Sanskrit dictionary-making, and there is little inherent evidence in Amara-Sinhas work (the Amara-kosha) to show that in its present form, it was separated from them by any wide interval The number of works on language published in 1877 in the Indian tongues, was 604, and in 1882 738

The Amara kosha 550 a d >

Brahman astronomy

Independent period, to

The astronomy of the Prihmans has formed alternately the subject of excessive admiration and of misplaced contempt The truth is that there are three periods of Sinskrit astronomy (Jioti-sastra) The first period belongs to Vedic times and has lett a moderate store of independent observations and inferences worked out by the Brahmans. The Vedic poets had arrived at a tolerably correct calculation of the solar year which they divided into 360 days, with an interculary month every five years. They were also requainted with the phases of the moon, they divided her pathway through the heavens into 27 or 28 lunar mansions, and they had made observations of a few of The order in which the lunar mansions are the fixed stars enumerated is one which must have been established 'some where between 1472 and 536 BC'(Weber). The planets were also an independent, although a later discovery, bordering on the Vedic period. At first seven, afterwards nine in number, they bear names of Indian origin, and the generic term for planet, graha, the seizer, had its source in primitive Sanskrit The planets are mentioned for the first time, perhaps, in the Taittiriya Aryanaka. The I aws of Manu, however, are silent regarding them, but their worship is inculcated in the later code of Yajnavalkya The zodiac il signs and the Jyotisha, or so-called Vedic Calendar,—with its solstitual points referring to 1181 BC., or to a period still more remote,—seem to have

been constructed, or at any rate completed, in an age long subsequent to the Veda. The influence of the Chinese observers upon Indian astronomy, especially with regard to the lunar mansions, is an undecided but a pregnant question

The second period of Brahman astronomy dates from the Second Greek and Greco-Bactrian invasions of India, during the three period, centuries before Christ The influence of Greece influences, life into the astronomy of the Hindus The Indian astrono- 327 B C to mers of this period speak of the Yavanas, or Greeks, as their instructors, and one of their five systems is entitled the Romaka-Siddhánta 1 Their chief writer in the 6th century, Varaha-Mihira, 504 AD, gives the Greek names of the planets side by side with their Indian appellations, and one of his works bears a Greek title, Hora-Sastra (ωρη) The Greek division of the heavens into zodincal signs, decani, and decrees, enabled the Brahmans to cultivate astronomy in a scientific spirit, and they elaborated a new system of their own They rectified the succession of the Sanskrit lunar mans ons which had ceased to be in accordance with the actual facts, transferring the two last of the old order to the first two places in the new

In certain points the Brahmans advanced beyond Greek Best age of Their fame spread throughout the West, and found Brahman astronomy, entrance into the Chronicon Paschale (commenced about 330 AD, revised, under Herachus 610-641 AD) In the 8th and 9th centuries, the Arabs became their disciples, borrowed the lunar mansions in the revised order from the Hindus, and translated the Sanskrit astronomical treatises Suddhantas under the name of Sindhends The Brahman astronomer of the 6th century, 6 h century Varaha-Mihira, was followed by a famous sage, Brahma-gupta, AD in the 7th (664 AD) and by a succession of distinguished workers ending with Bhaskara, in the 12th (1150 AD)

The Muhammadan conquest of India then put a stop to Third further independent progress. After the death of Bhaskara, period, Indian astronomy gradually decayed, and owed any occasional under Hindu observers of Muhamimpulse of vitality to Arabic science note arose at rare intervals In the 18th century (1710-1735) madan rule— Raja Jai Singh II constructed a set of observatories at his 1150-1800 capital Jaipur, and at Delhi, Benares, Muttra, and Ujjain AD His observations enabled him to correct the astronomical tables observa

<sup>1</sup> That is, the Grecian Siddhanta. Another the Paulisa Siddhanta, is 1728 stated by Al Dirum to have been composed by Paulus al Yunam, and is probably to be regarded, says Weller, as a translation of the Euraywyn of Paulus Alexandrinus But see Webers own footnote, No 277, p 253, Hist Ind Lr' (1878)

Raja of Jupur s observa tories, 1728

of De la Hire, published in 1702, before the French accepted the Newtonian Astronomy The Rája left, as a monument of his skill, lists of stars collated by himself, known as the Tij Muhammad Shahi, or Tables of Muhammad Shah, the I mperor of Delhi, by whose command he undertook the reformation of the Indian Calendar His observatory at Benares survives to this day, and elsewhere, his huge astronomical structures testify, by their ruins to the ambitious character of his observations Nevertheless, Hindu astronomy steadily declined From Vedic times it had linked omens and portents with the study of the Under the Muhammadan dynasties it degenerated heavens into a tool of trade in the hands of almanae makers, genealogists, astrologers and charlatans. It is doubtful how far even Rap Jai Singh's observations were conducted by native It is certain that the Catholic mission iries astronomers. contributed greatly to his reputation, and that since the sixteenth century the astronomy of the Hindus, as of the Chinese, is deeply indebted to the science of the Jesuits

Brahman matre matres

In algebra and arithmetic the Brahmans attained to a high degree of proficiency independent of Western aid we owe the invention of the numerical symbols on the decimal system the Indian figures 1 to 9 being abbreviated forms of the initial letters of the numerals themselves,1 and the zero, or o representing the first letter of the Sanskrit word for empty (sunja) I he correspondence of the numeral figures with the initial letters of their Indian names, can be clearly traced in the Lundi character, a cursive form of writing still used in the Punjab especially among the hereditary trading castes The Arabs borrowed these figures from the Hindus, called them the 'Indian cyphers,' and transmitted them to I urope The Arabian mathematicians, indeed, frequently extol the learning of the Indians, and the banskrit term for the apex of a planets orbit seems to have passed into the Latin translations of the Arabic astronomers 2. The works on mathematics and mechanical science, published in the native languages in India in 1877, numbered 89 and, in 1882, 166

Brahman medicinc The medical science of the Brahmans was also an independent development. The national astronomy and the national medicine of India alike derived their first impulses from the exigencies of the national worship. Observations of the

<sup>&</sup>lt;sup>1</sup> Dr. Burnell, however, questioned this generally accepted view, and suggested that the old cave numerals of India are themselves of Greek origin

The San-krit meha has become the ana (yen ansis) of the Laun translators (Remand, p. 525, Weber, p. 257)

heavenly bodies were required to fix the dates of the recurring festivals, anatomical knowledge took its origin in the dissection of the victim at the sacrifice, with a view to dedicating the different parts to the proper gods The Hindus ranked their Its indemedical science as an upa-veda, or a supplementary revelation, pendent develop under the title of Ayur-Veda, and ascribed it to the gods ment, 4th But their earliest medical authorities belong to the Sutra century period, or later scholastic development, of the Yajur-Veda century The specific diseases whose names occur in Pánini's Grammar A D indicate that medical studies had made progress before his time (350 LC) The chapter on the human body in the earliest Sanskrit dictionary, the Amara kosha (circ 550 AD), presupposes a systematic cultivation of the science. The works of the great Indian physicians, Charaka and Susruta, were translated into Arabic not later than the 8th century

Unlike the astronomical treatises of the Brahmans, the The basis Hindu medical works never refer to the Yavanas, or Greeks, of Arabic as authorities, and, with one doubtful exception, they con-European tain no names which point to a foreign origin. The chief seat medicine of the science was at Benares, far to the east of Greek influence in India. Indeed, Indian pharmacy employed the weights and measures of Provinces still farther to the south-east, namely, Magadha and Kalinga Arabic medicine was founded on the translations from the Sanskrit treatises, made by command of the Kaliphs of Bigdid 750-960 AD medicine, down to the 17th century, was based upon the Arabic, and the name of the Indian physician Charaka repeatedly occurs in the Latin translations of Avicenna (Ibn Sina) Rhazes (M Rasi), and Serapion (Ibn Serabi)

It described the structure of the body, its organs, ligaments Indian medicine muscles, vessels, and tissues. The materia medica of the Hindus embraces a vast collection of drugs belonging to the mineral, vegetable, and animal kingdoms, many of which have been adopted by I uropean physicians. Their pharmacy contained ingenious processes of preparation with elaborate directions for the administration and classification of medicines. Much attention was devoted to hygiene, to the regimen

The surgery of the ancient Indian physicians appears to Indian have been bold and skilful. They conducted amputations, surgery arresting the bleeding by pressure a cup-shaped bandage, and boiling oil They practised lithotomy, performed operations in the abdomen and uterus, cured hernia, fistula, piles, set broken

of the body, and to diet

Indian medicine dealt with the whole area of the science Scope of

Nosemaking

bones and dislocations, and were devterous in the extraction of foreign substances from the body. A special branch of surgery was devoted to rhinoplasty, or operations for improving deformed ears and noses, and forming new ones, a useful operation in a country where mutilation formed part of the judicial system, and one which European surgeons have borrowed It is practised with much success in the Residency Hospital at Indore, Holkar's capital, as jealous husbands in Native States still resort, in spite of more humane laws, to their ancient remedy against a suspected or unfuthful wife consists in throwing the woman violently down on the ground and slashing off her nose

Operati vr for near algir.

The ancient Indian surgeons also mention a cure for reuralgia analogous to the modern cutting of the 11th neive above the evebrow. They devoted great care to the making et surgical instruments, and to the training of students by means of operations performed on was spread out on a board, or on the tissues and cells of the regetable kingdom, and t pon dead animals They were expert in midwiery, not shrinking from the most critical operations, and in the diseases of women and children Their practice of physic embraced the classification, cruses symptoms, and treatment of diseases -diagnosis and prognosis. The maladies thus dealt with have been arranged into 10 classes namely -those affecting (1) the humours, (2) the general system, including fevers (3 to 9) the several organs and parts of the body and (10) trivial complaints. Considerable advances were also made in veteri Veterinary many science, and monographs exist on the diseases of horses and elephan's.

surgery

Best age of Indian medicun, 750 A D

Buddhist public hospitals

The best era of Indian medicine was contemporary with the ascendancy of Buddhism (250 LC to 750 AU) and did not 250 h C , long survive it. The science was studied in the chief centres of Buddhist civilisation, such as the great monastic university of Nalanda, near Gayá. The ancient Brahmans may have derived the rudiments of anatomy from the dissection of the sacrifice, but the public hospitals which the Buddhist princes established in every city were probably the true schools of A large number of cases were collected in Indian medicine them for continuous observation and treatment, and they supplied opportunities for the study of disease similar to those which the Greek physicians obtained at their hospital camps around the mineral springs. Hippokrates was a priest physician, indeed the descendant of a line of priest physicians, practising at such a spring, and Charaka was in many ways his Indian

counterpart To the present day, works on Hindu medicine frequently commence their sections with the words, 'Charaka says' This half-mythical authority, and Susruta, furnish the types of the ancient Indian physician, and probably belong, so far as they were real personages, to about the commencement Both appear as Bráhmans, Susruta of the Christian era being, according to tradition, the son of the sage Viswamitra (p 92), and Charaka, of another 'Veda learned Muni,'

As Buddhism passed into modern Hinduism (750-1000 Decline of AD), and the shackles of caste were reimposed with an iron Hindu rigour, the Brahmans more scrupulously avoided contact with medicine, blood or morbid matter. They withdrew from the medical profession, and left it entirely in the hands of the Vaidvas, a lower caste, sprung from a Brahman father and a mother of the Vaisya or cultivating class. These in their turn shrank 750 to more and more from touching dead bodies, and from those ancient operations on 'the carcase of a bullock,' etc., by which alone surgical skill could be acquired. The abolition of the public hospitals, on the downfall of Buddhism, must also have proved a great loss to Indian medicine The series of Muhammadan conquests, commencing about 1000 AD brought in a new school of foreign physicians who derived their knowledge from the Arabic translations of the Sanskrit medical works of the best period. These Musalman doctors or hakims monopolized the patronage of the Muhammadan princes and nobles of India. The decline of Hindu medicine went on until it has sunk into the hands of the village kabiraj, whose The knowledge consists of jumbled fragments of the Sanskrit texts village and a lynamic an and a by no means contemptible pharmacopaia, supplemented by spells, fists, and quackers. While the dissection of the human body under Vesalius and Fabricius was giving birth to modern medicine in the 17th century the best of the Hindu physicians were working upon the recollections of a long past age without any new lights

On the establishment of medical colleges in India by the English British Government, in the middle of the present century, medical colleges the Muhammadan youth took advantage of them in dis- in India proportionately large numbers. But the Brahmans and intellectual classes of the Hindus soon realized that those colleges were the doors to an honourable and a lucrative career Having accepted the change, they strove with their characteristic industry and acuteness to place themselves at the head of it. In 1879, of the 1661 pupils in British medical schools throughout India, 950 were Hindus and 284 were

medicine ın India.

Revival of Muhammadans, while the remaining 427 included Christians, Parsis, and all others Of three Indian youths studying medicine at the University of Edinburgh during the same year, one belonged to the Kayasth or Hindu writer caste, another to the Vaidya or hereditary physician caste, and the third was a The number of medical works published in the native languages of India in 1877 amounted to 130, and in 1882 to 212 besides 87 on natural science, not including mathematics and mechanics 1

Hindu art of war

The Brahmans regarded not only medicine, but also the arts of war, music, and architecture as upa redas, or supplementary parts of their divinely-inspired knowledge. Viswamitra, the Vedic sage of royal warnor birth who in the end attained to Brihminhood (p. 92) was the first teacher of the art of war (Inanus reda) The Sanskrit epics prove that strategy had attrined to the position of a recognised science before the birth of Christ and the later Agni Purana devotes long sections to its systematic \*reatment

Indian niusic

The Indian art of music (zantharra reda) was destined to exercise a wider influence. A regular system of notation had been worked out before the age of Panini (350 PC), and the seven notes were designated by their initial letters. This notation passed from the Brahmans through the Persians to Arabia and was thence introduced into Luropean music by Guido d'Arczzo at the beginning of the 11th century? Some, indeed suppose that our modern word gamul comes not from the Greek letter samma, but from the Indian sama (in Prakrit in Sanskrit giuma), literalis 'a musical scale'

Hindu music, after a period of excessive claboration sank under the M shamm alans into a state of arrested development Of the 36 chief musicians in the time of Akhar, only 5 were Not content with tones and semi-tones the Indian

<sup>1</sup> Fer monog a, hs on this in creating branch of Indian serice, see the aricles of Dr F Hans, Leter die Ergringe der Indischen Media n, mit besonderem bezug auf Su ruth ' and Hippokrates und cie In asche Me han des Mittelaiters, Sitt d'rift der Deut hen Morgin linin hen Ge ellser af for 1876, p. 617, und 1877, p. 647 the Indi che Medica, Karaka,' of Profes or Roth in the Zetchritt for Deutschen No n'inti enen Gee' chaf' in 1872 p 441 Pac I were of the History of Mancine among the Asiati, by I A Wir M D, 2 vols, 1807 II II Wilson's little essay Works in 269 cl 1864, the excellent summary in Weber's History of Indian I it ratur, In once, 1878, and Dr. Watts' Diet Lanning Products of Inaia (Ca cut a, 1885)

Non Bohlen, Das Alte India n n 195 (1850), Benfey's Inten (I wich & Graher's Encyclofa the Note, 1840, quoted by Weber, Hit Ind Lit, p. 272, fournote 315 (1878)

musicians employ a more minute sub-division, together with a number of sonal modifications, which the Western ear neither recognises nor enjoys. Thus they divide the octave into 22 sub tones, instead of the 12 tones and semi-tones of the European scale. This is one of several fundamental differences. but it alone suffices to render Indian music barbaric to us, giving it the effect of a Scotch ballad in a minor key, sung intentionally a little out of tune

Melodies which the Indian composer pronounces to be Its peculi the perfection of harmony, and which have for ages touched arities the hearts and fired the imagination of Indian audiences, are condemned as discord by the European critic. The Hindu car has been trained to recognise modifications of sound which the European ear refuses to take pleasure in Our ears, on the other hand, have been taught to expect harmonic combinations for which Indian music substitutes different combinations of its own The Indian musician declines altogether to be judged by the few simple Hindu airs which the English ear can appreciate It is, indeed, impossible to adequately represent the Indian system by the European notation and the full range of its effects can only be rendered by Indian instruments—a vast collection of sound-producers, slowly claborated during 2000 years to suit the special requirements of Hindu music. The complicated structure of its musical modes (10.3) rests upon three separate systems, one of which consists of five, another of six and the other of seven notes It preserves in a living state some of the early forms which puzzle the student of Greek music, side by side with the most complicated developments

Patriotic Hindus have of late endeavoured to bring about Revival of a musical revival upon the old Sunskrit basis. Within the Hindu music past fifteen years Rija Sir Surendra Mohan Tigore of Culcutta has published a series of interesting works on Indi in music in the English tongue adopting as far as possible the European notation. He has organized an orchestra to illustrate the art and presented complete collections of Hindu instruments to the Conservatoire at Paris. and to other institutions in Furope One of the earliest subjects which the new movement took as its theme, was the celebration of the Queen of England and her ancestors, in a Sanskrit volume entitled the Victoria Gitika (Calcutta, 1875) No Englishman has yet brought an adequate acquaintance with the hehnique of Indian instrumentation to the study of Hindu music. The art still awaits investigation by some eminent

Western professor, and the contempt with which Europeans in India regard it, merely proves their ignorance of the system on which Hindu music is built up

Indian architecture

Indian architecture (arthu-sustra 1), although also ranked as an upa-reda or supplementary part of inspired learning, derived its development from Buddhist rather than from Brahmanical impulses. A brick altar sufficed for the Vedu newl Buddhists were the great stone builders of India monasteries and shrines exhibit the listory of the art during twenty-two centuries from the culiest cive structures and rock temples, to the latest Jain creetions, duzling in stucco and overcrowded with ornament. It seens not improbable t at the churches of Europe owe their steeples to the Buddhist The Greco bactrian kingdom profoundly influenced architecture and sculpture in Northern India the Musilman conquerors brought in new forms and requirements of their Nevertheless. Hindu art powerfuls asserted itself in the imperial works of the Mughals, and has left memorials which extort the admiration and aston shment of our acc

C cco Bactrian and

Muham ma ran mhucnee The Hindu builders derived from the Muhammidans a lightness of structure which they did not formerly possess. The Hindu phace architecture of Gwaliot the Indian Muhammadan mosques and mausoleums of Agra and Delha, with several of the older Hindu temples of Southern India stand unrivalled for grace of outline and elaborate wealth of ornament. The Taj Mahal at Agra jistines Heber's exclumation that its builders had designed like Titans and finished like jewellers. The open carved markie windows and screens at Ahmadabad furnish examples of the skilf il ornamentation which beautifies every Indian building, from the cave monasteries of the Buddhist period downward. They also show with what plasticity the Hindu architects adapted their Indian ornamentation to the structural requirements of the Muham madan mosque.

Indian lecorative art

English decorative art in our cas has borrowed largely from Indian forms and patterns. The exquisite scrolls on the rock temples at Karli and Ajanta, the delicate marble tracery and flat wood-carving of Western India, the harmonious blending of forms and colours in the fabrics of Kashmir, have contributed to the restoration of taste in England. Indian art-work, when faithful to native designs, still obtains the highest honours at the international exhibitions of Europe. In pictorial art, the Hindus never

<sup>1</sup> Specifically, numána silpam, or nirmána vulyá

made much progress, except in miniature-painting, for which Indian perspective is not required But some of the book-illustrations. pairting executed in India under Persian impulses, are full of spirit and beauty The Royal library at Windsor contains the finest existing examples in this by-path of art The noble manuscript of the Shah Jahan Namah, purchased in Oudh for £1200 in the last century, and now in possession of Her Majesty, will itself amply repay a visit The specimens at the South Kensington Museum do not adequately represent Indian painting (1882) But they are almost everything that could be desired as regards Indian ornamental design, including Persian book binding and several of the minor arts

While the Brahmans claimed religion, theology, and philo Brahman sophy as their special domain, and the chief sciences and arts law as supplementary sections of their divinely-inspired knowledge, they secured their social supremacy by codes of law earliest Dharma-sastras, or legal treatises, belong to the Grihva-Giihya Sutra period, a scholastic outgrowth from the Veda But their outra two great digests, upon which the fabric of Hindu jurisprudence has been built up are of later dute. The first of these, the code of Manu, is separated from the Vedic era by a series of The cone Brahmanical developments of which we possess only a few or of Manu the intermediate links. It is a compilation of the customary law, current probably about the 5th century BC, and exhibits the social organization which the Brihmars, after their successful struggle for the supremacy, had established in the Middle Land of Benial The Brahmans indeed, claim for their laws a divine origin, and ascribe them to the first Manu or Aryan man, 30 millions of years ago. But as a matter of fact, the laws of Minn are the result of a series of attempts to codify the usages of some not very extensive centre of Bráhmanism in Northern India They form a metrical digest of local customs, condensed by degrees from a legendary mass of 100,000 couplets (slokas) into 2685. They may possibly have . been reduced to a written code with a view to securing the system of caste against the popular movement of Buddhism, and they seem designed to secure a rigid fixity for the privileges of the Brahmans

The date of the code of Manu has formed a favourite Theage of subject for speculation from the appearance of Sir William Manu Jones' translation 1 downwards The history of those specula tions is typical of the modernizing process which scholarship

<sup>&</sup>lt;sup>1</sup> Calcutta, 1794, followed by Huttner's translation into German, 1797 VOL. VI

has applied to the old pretensions of Indian literature. The present writer has refrained from anything approaching to dogmatic assertion in regard to the dates assigned to Vedic and Sanskrit works, as such assertions would involve disquisitions quite beyond the scope of this volume

Date of Manu?

It may, therefore, be well to take the code of Manu as a single instance of the uncertainty which attaches to the date of one of the best known of Indian treatises Jones accepted for it a fabulous antiquity of 1250 to 500 BC Schlegel was confident that it could not be later than 1000 BC Professor Monier Williams puts it at 500 BC, and Johaentgen assigns 350 PC as the lowest possible date. Dr Burnell, in his posthumous edition of the code,1 discusses the question with admirable learning, and his conclusions must, for the present be accepted as authoritative. As indicated in a recent paragraph, the code of Manu, or Mánava Dharmasastra, is not in its existing metrical form an original treatist, but a versified recension of an older prose code. In its carlier shape it belonged to the Sutra period, probably extending from the sixth to the second century LC. Dr Burnell's investigations show that our present code of Manu was a popular work intended for princes or Rajas and their officials, rather than a technical treatise for the Bruhmans. They also prove that the present code must have been compiled between 100 and and they indicate the latter date as the most probable one viz 500 vn 'It thus appears concludes I)r Burnell, 'that the text belongs to an outgrowth of the Brahmanical literature, which was intended for the benefit of the kings, when the Brahmarical civilisation had begun to extend itself over the south of India 2

prose code 500-200 B C (2)

Older

Present metrical code 100 500 A D

Pro<sup>1</sup> 3<sup>1</sup> 3 500 A 1

Code of Vajna Valkya

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The second great code of the Hindus, cahed after Yijna valkya, belongs to a period when Buddhism had established itself and probably to a territory where it was beginning to succumb to the Brahmanical reaction. It represents the Brahmanical side of the great controversy (although a section of it deals with the organization of Lucdhist monasteries), refers to the execution of deeds on metal plates, and altogether marks an advance in legal precision. It refers more especially to the customs and state of society in the kingdom of Mithila, now the Tirhut and Purniya Districts, after the Aryans had securely settled themselves in the Gangetic Provinces to the

The Ordinances of Vinu, by the Lite Arthur Coke burnell, Ph D., C I I., of the Madras Civil Service - Irubner - 1884 - Pp xx xivii - Idem, xxviii

east and south-east of their old Middle Land of Bengal. Mıtakshara commentary of the law which bears the name of shara Yaınavalkya is in force over almost all India except Lower Bengal Proper, and the Hindus, as a whole, allow to Yajnavalkya an authority only second to that of Manu Yájnavalkya's code was compiled apparently not later than the 6th or 7th century AD It is right again to mention that much earlier periods have been assigned both to Manu and Yainavalkya than those adopted here Duncker still accepts the old date of 600 BC as that at which Manu's code 'must have been put together and written down'1

These codes deal with Hindu law in three branches, Scope of namely—(1) domestic and civil rights and duties, (2) the Hindu administration of justice, (3) purification and penance They stereotyped the unwritten usages which regulated the family life and social organization of the old Aryan communities in the Middle Land of Bengal They did not pretend to supply a body of law for all the numerous races of India, but only for Hindu communities of the Brihmanical type ful whether they correctly represented the actual customary law even among the Hindu communities in the Middle Land of the Ganges For they were evidently designed to assert and maintain the special privileges of the Brahmans. This they effected by a rigid demarcation of the employments of the beoble, each caste or division of a caste having its own hereditary occupation assigned to it, by stringent rules against the inter- Its rigid mingling of the castes in marriage, by forbidding the higher caste castes, under severe penalties, to eat or drink or hold social system intercourse with the lower, and by punishing the lower castes with cruel penances, for defiling by their touch the higher castes, or in any way infringing their privileges

They exhibit the Hindu community in the four uncient Legal classes of priests, warriors, cultivators, and serfs (sudras) division of the people But they disclose that this old Aryan classification failed to represent the actual facts even among the Arvan communities in Northern India. They admit that the mass of the people did not belong to any one of the four castes, and they very inadequately ascribe it to concubininge or illicit con nections I he ancient Brahmanical communities in Northern India, as revealed by the codes, consisted—First, of an Aryan The actual element divided into priests, warriors, and cultivators, all of division of whom bore the proud title of the Twice-Born and wore the the people sacred thread Second, the subjugated races, 'the once-born'

Ancient History of India, by Professor Max Duncker, p 195, ed 1881

Sudras Third, a vast residue termed the Varna-sankara, literally the 'mingled colours,' a great but uncertain number of castes, exceeding 300, to whom was assigned a mixed descent from the four recognised classes The first British Census of India, in 1872, proved that the same division remains the fundamental one of the Hindu community to this day

Growth of Hindu law

As the Brihmans spread their influence eastwards and southwards from the Middle Land of Bengal, they carried their codes with them. The number of their sacred lawbooks (Dharma-sistras) amounted to at least fifty six, and separate schools of Hindu law sprang up. Thus the Dayabhaga version of the Law of Inheritance prevails in Bengal, while the Mitakshara commentary on Yapavalkya is current in Madras and throughout Southern and Western India. But all modern recensions of Hindu law rest upon the two codes of Manu or of Yapavalkya, and these codes as we have seen, only recorded the usages of certain Brahmanical centres in the north, and perhaps did not furly record even them

into Hinduism, such codes proved too narrow a basis for dealing with the rights, duties, and social organization of the people Later Hindu legislators accordingly inculcated the recognition of the local usages or land law of each part of the country, and of each class or tribe. While binding together, and preserving the historical unity of, the Aryan twice born castes by systems of law founded on their ancient codes they made provision for the customs and diverse stages of civilisation of the ruder peoples of India over whom they established their ascendency. By such provisions alike in religion and in law,

As the Brahmans gradually moulded the population of India

the Brahmans incorporated the Indian races into that loosely coherent mass known as the Hindu population

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It is to this plastic element that Hinduism owes its success, and it is an element which Linglish administrators have some times overlooked. The races of British India exhibit many stages of domestic institutions from the polyandry of the Nairs to the polyamy of the Ku'in Brahmans. The structure of their rural organization varies, from the nomadic husbandry of the hillmen, to the long chain of tenures which in Bengal descends from the landlord through a series of middle men to the actual tiller of the soil. I very stage in industrial progress is represented, from the hunting tribes of the central plateau to the rigid trade-guilds of Gujarát. The Hindu legislators recognised that each of these diverse stages of social development had its own usages and unwritten law. Even

the code of Manu acknowledged custom as a source of law, Incor and admitted its binding force when not opposed to express law of local Vrihaspati says, 'The laws (dharma) practised by the various customs countries, castes, and tribes, they are to be preserved, other-into Hinduism wise the people are agitated' Devala says, 'What gods there are in any country. and whatsoever be the custom and law anywhere, they are not to be despised there, the law there is such' Varáha Mihira says, 'The custom of the country is first to be considered, what is the rule in each country, that is to be done' A learned Figlish judge in Southern India thus summed up the texts 'By custom only can the Dharmasástra [Hindu law] be the rule of others than Brahmans [only one thirtieth of the population of Madras], and even in the case of Brahmans it is very often superseded by custom'1

The English, on assuming the government of India, wisely Perils of declared that they would administer justice according to the modern customs of the people But our High Courts enforce the codifica Brahmanical codes with a comprehensiveness and precision unknown in ancient India. Thus in Bengal, the non-Hindu custom of sa, at, by which deserted or divorced wives among the lower castes marry again, was lately tried according to 'the spirit of Hindu law,' while in Madras, judges have pointed out a scrious divergence between the Hindu law as now administered, and the actual usages of the people. Those usages are unwritten and uncertain. The Hindu law is printed in many accessible forms 2 and Hindu barristers are ever pressing its principles upon our courts. The Hindu law is apt to be applied to non-Hindu or semi-Hindu, customs

I fforts at comprehensive codification in British India are thus surrounded by special difficulties. For it would be improper to give the fixity of a code to all the unwritten haltfluid usiges current among the 300 unhomogeneous castes of Hindus, while it might be fraught with future injustice to exclude any of them Each age has the gift of adjusting

1 Dr. Burnell's Pija - 161 gha, Introd p xv. See also Hinau I aw as administered by the High Court of Jun it ore it Heuras by I Nelson M A, District Judge of Cuddapah, chaps in and it (Madras, 1877). and Journal Key As Sec, pp 208-230 April 1881'

2 For the latest treatment of Hindu law from the philosophical scholarly, and practical points of view see the third edition of West and Buhler's Digest of the Hindu I are of Inheritan i, Partitor, and Ascrition 2 vols Bombay 1884 I rom the writings of Maine, Burnell, and Nelson in Madras, and those of the Honourabic kaymond West and Dr. Bühler in Bombay, a new and more just conception of the character of Hindu law and of its relations to Indian custom may be said to date

Codes zersus survival of fittest customs its institutions to its actual wants, especially among tribes whose customs have not been reduced to written law. Many of those customs will, if left to themselves, die out. Others of them, which prove suited to the new social developments under British rule, will live. A code should stereotype the survival of the fittest, but the process of natural selection must be the work of time, and not an act of conscious legislation.

Restricted scope of Indian codifica tion This has been recognised from time to time by the ablest of Anglo-Indian codifiers. They restrict the word code to the systematic arrangement of the rules relating to some well marked section of juristic rights, or to some executive department of the administration of justice. In its larger sense write the Indian Law Commissioners in 1879, of a general assemblage of all the laws of a community, no attempt has yet been made in this country to satisfy the conception of a code. The time for its realization has manifestly not arrived. The number of works on I aw, published in the native languages of India in 1877 was 165 and in 1882, 181, besides 157 in English, total, 338 works on law published in India in 1882.

Secular Internture of the Hincus The Brahmans were not merely the depositaries of the sacred books the philosophy, the science, and the laws of the ancient Hindu commonwealth they were also the creators and custodians of its secular literature. They had a practical monopoly of Vedic learning, and their policy was to trace back every branch of knowledge and of intellectual effort to the Veda. In this policy they were aided by the divergence which, as we have seen, arose at a very early date between the written and spoken languages of India. Sunskrit literature, apart from religion, philosophy, and law, consists mainly of two great epics the drama, and a vast body of legendary, crotic, and mystical poetry.

Its chief tranches

The Maha

The venerable epic of the Mahábhárata ranks first. The orthodox legend ascribes it to the sage Vyasa who, according to Brahman chronology, compiled the inspired hymns into the four Vedas, nearly five thousand years ago (3101 BC). But one beauty of Sanskrit is that every word discloses its ancient origin in spite of mediæval fictions, and Vyisa means simply the 'arranger,' from the verb 'to fit together'. No fewer than twenty-eight Vyasas, incarnations of Brahma and Vishnu, came down in successive astronomical eras to arrange and promulgate the Vedas on earth. Many of the legends in the Mahábhar ital are of Vedic antiquity, and the main story

deals with a period assigned, in the absence of conclusive evidence, to about 1200 BC, and certainly long anterior to the time of Buddha, 543 BC But its compilation into its present form seems to have taken place many centuries later

Pánini (350 BC) makes no clear reference to it The in Its date. quisitive Greek ambassador and historian, Megasthenes, does not appear to have heard of it during his stay in India, 300 Dion Chrysostomos supplies the earliest external evidence of the existence of the Mahabharata, arc 75 A.D. arrangement of its vast mass of legends must probably have covered a long period Indeed, the present poem bears traces of three separate eras of compilation, during which its collection of primitive folk tales grew from 8800 slokas Its or couplets, into a cyclopædia of Indian mythology and growth legendary lore extending over eighteen books and 220,000 lines The twenty-four books of Homer's Iliad comprise only 15 693 lines the twelve books of Virgil's Encid, only 9868

The central story of the Mahabharata occupies scarcely Central one fourth of the whole or about 50,000 lines. It narrates story of the Maha a pre-historic strug le between two fimilies of the Lunar bharata. race for a patch of country near Delhi These families, alike descended from the royal Bharata consisted of two brotherhoods cousins to each other, and both brought up under the same roof. The five Pandavas were the miraculously born sons of King Pandu, who, smitten by a curse, resigned the sovereignty to his brother Dhrita rashtra and retired to a hermitige in the Himplayis, where he died The ruins of his capital, Hastinabura, or the 'Elephant City,' are pointed out beside a descried bed of the Ganges, 57 miles north-east of Delhi, at this day. His brother Dhrita-rashtra ruled in his stead, and to him one hundred sons were born, who took the name of the Kaurayas from an ancestor Kuru Dhrita-rashtra acted as a futhful guardian to his five nephews, the Pandavas, and chose the eldest of them as hear to the family kingdom His own sons resented this act of supersession, and so arose the quarrel between the hundred Kaurwas and the five Pandayas which forms the main story of the Mahabharata. The nucleus of the legend probably belongs to the period when the Aryan unmigrants were settling in the upper part of the triangle 12th cenof territory between the Jumna and the Ganges, and before tury B C they had made any considerable advances beyond the latter river It is not unreasonable to assign this period to about the 12th century BC

The hundred Kaurayas forced their father to send away their Its outline

five Pandava cousins into the forest. The Kauravas then burned down the woodland but in which the five Pandavas dwelt. The five escaped, however, and windered in the disguise of Bráhmans to the court of King Driupada, who had proclaimed a swayam vara or miden's-choice,—a tournament at which his daughter would take the victor as her husband. Arjuna, one of the Pandavas, bent the mighty bow which had defied the strength of all the rival chiefs, and so obtained the fur princess, Draupadi who became the common wife of the five brethren Their uncle, the good Dhrita-rashtra, recalled them to his capital, and give them one half of the family territory towards the Jumna reserving the other half for his own sons

The Pandava brethien hived off to their new settlement, Indra prastha, afterwards Delhi, cleaning the juncle, and

reigned but the Kauravis tempted Yudishthira, 'firm in fight, the eldest of the Pindayas, to a gimbling match, at

I or a time peace

Gambling ma cles

which he lost his kingdom his brothers himself, and last of all his wife. Their father, however, forced his sons to restore their wicked gains to their cousins. But Yudishthira was again seduced by the Kauravis to stake his kingdom it dice, again lost it, and had to retire with his wife and brothren into exile for twelve years. Their banishment ended the five Pandivas returned at the head of an army to win back their kingdom. Many battles followed. Other Aryan tribes between the Jumpa and the Ganges together with their gods and divine heroes, joined in the struggle, until at last all the hundred

driving out the Nigis or forest races

Pandavas only the five brethren remained

Final everthrow of the 100 Kauravas

Leign of the five Pandavas Their uncle, Dhrita rashtra, made over to them the whole kingdom, and for a long time the Pandavas ruled gloriously, celebrating the aswa medha, or 'great horse sacrifice, in token of their holding imperial sway. But their uncle, old and blind, ever taunted them with the slaughter of his hundred sons, until at last he crept away with his few surviving ministers, his aged wife and his sister in-law the mother of the Pandavas, to a hermitage, where the worn-out band perished in a forest fire. The five brethren, smitten by remorse, gave up their kingdom, and taking their wife, Draup idi, and a faithful dog, they departed to the Himalayas to seek the heaven of Indra on Mount Meru. One by one the sorrowful pilgrins died upon the road, until only the eldest brother, Yudishthira, and the dog reached the gate of heaven. Indra invited him to enter, but he refused if his lost wife and brethren were not also

Kaurayas were slain and of the friends and kindred of the

Their pi' grimant to heaver admitted The prayer was granted, but he still declined unless his faithful dog might come in with him. This could not be allowed, and Yudishthira, after a glimpse of heaven, was thrust down to hell, where he found many of his old comrades in anguish He resolved to share their sufferings rather than enjoy paradise alone But having triumphed in this crowning trial, the whole scene was revealed to be máva or illusion, and the reunited band entered into heaven, where they rest for ever with Indra

Even this story, which forms merely the nucleus of the Slow Mahabharata, is the collective growth of far distant ages For growth of the central example, the two last books, the 17th and 18th, which narrate story 'the Great Journey' and 'the Ascent to Heaven,' are the product of a very different epoch of thought from the early ones, which portray the actual life of courts and camps in ancient India The swaiam-vara or husband-choosing of Draupadi is a genuine relic of the tournament age of Aryan Her position as the common wife of the five brethren preserves a trace of even more primitive institutions -institutions still represented by the polyandry of the Nairs The poly and Himalayan tribes, and by domestic customs which are andro of Draupadi survivals of polyandry among the Hinduized low-castes all over Thus in the Punjab among Jat families too poor to bear the marriage expenses of all the males, the wife of the eldest son has sometimes to accept her brothers-in law as joint The polyandry of the Ghakkars the brave people of Rawal Pindi District, was one of their characteristics which specially struck the advancing Muhammadans in 1008 AD The Karakat Vellálars of Madura, at the opposite extremity of the peninsula, no longer practise polyandry, but they preserve a trace of it in their condonement of cohabita tion with the husband's kindred, while adultery outside the husband's tamily entails expulsion from caste

Such customs became abhorrent to the Brahmans Brahmans justify Draupadi's position, however, on the ground that as the five l'andwa brethren were divinely begotten emana tions from one deity, they formed in reality only one person, and could be lawfully married to the same woman. No such afterthought was required to uphold the honour of Draupaui in the age when the legend took its rise. Throughout the whole Mahabharata she figures as the type of a high-born princess, and a chaste, brave, and futhful wife. She shares in every sorrow and triumph of the five brethren, bears a son to each, and finally enters with the true-hearted band into the glory of Indra Her husbands take a terrible vengeance on insult

offered to her, and seem quite unaware that a later age would deem her position one which required explanation 1

the Maha bharata.

The struggle for the kingdom of Hastinapura forms, how-The rest of ever, only a fourth of the Mahabharata The remainder con sists of later additions Some of these are legends of the early Aryan settlements in the Middle Land of Bengal tacked on to the central story, others are mythological episodes, theological discourses, and philosophic disquisitions, intended to teach the military caste its duties, especially its duty of reverence to the Bráhmans. Taken as a whole the Mahabhirata may be said to form the cyclopædia of the Heroic Age in Northern India, with the struggle of the Pándwas and Kaurwas as its original nucleus and the submission of the military power to priestly domination as its later didactic design

The Rama yana.

The second great Indian epic, the Rámávana, recounts the advance of the Arvans into Southern India Unlike the Mahabharata, its composition is assigned not to a compiler (ziasa) in the abstract, but to a named poet, Valmiki the other hand, the personages and episodes of the Ramayana have an abstract or mythological character, which contrasts with the matter-of fact stories of the Mahabhárata of the Ramavana, Sitá, is literally the 'field furrow,' to whom the Vedic hymns and early Arvan ritual paid divine honour She represents Arvan husbandry, and has to be defended against the raids of the aborigines by the hero R ima an incar nation of the Arvan deity Vishnu, and born of his divine nector Rama is regarded by Weber as the analogue of Balarama, the 'Ploughbearer' (halabhrit) I rom this abstract point of view, the Ramavana exhibits the progress of Arvan ploughhusbandry among the mountains and forests of Central and Southern India, and the perils of the agricultural settlers from the non ploughing nomadic cultivators and harting tribes

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The abduction of Sita by an aboriginal or demon prince who carried her off to Ceylon, her eventual recovery by Rama, and the advance of the Arrans into Southern India, form the central story of the Ramayana. It differs therefore from the central legend of the Mahabharata, as commemorating a period when the main arena of Aryan enterprise had extended itself far

<sup>1</sup> The beautiful story of Savitri, the wife faithful to the end, is told in the Miliabbarata by the sage Markandeyn in answer to Judishthira's question, whether any woman so true an I noble as Dramadi had ever I cen known Savitri, or the loss of her husband, dogged the steps of Yama, King of Death, until she wrung from him, one by one, many blessings for he family, and finally the reluctant retoration of her husband to life

beyond their ancient settlements around Delhi, and as a pro-later than duct of the Bráhman tendency to substitute abstract personifica- Maha bharata tions for human actors and mundane events The nucleus of Legend the Mahábhárata is a legend of ancient life, the nucleus of the Rámáyana is an allegory Its most modern form, the Adhyátma Rámáyana, still further spiritualizes the story, and elevates Rama into a saviour and deliverer, a god rather than a hero 1

Its reputed author, Válmíki, is a conspicuous figure in Valmiki the epic, as well as its composer. He takes part in the action of the poem, receives the hero Rama in his hermitage, and afterwards gives shelter to the unjustly banished Sita and her twin sons, nourishing the aspirations of the youths by tales of their father's prowess. These stories make up the main part of the Ramayana, and refer to a period which has been loosely assigned to about 1000 BC But the poem could not have been put together in its present shape many centuries, if any before our era. Parts of it may be earlier than the Mahabhárata, but the compilation as a whole apparently belongs to a later date. The Rámayana consists of seven books (Kandas) and 24,000 slokas, or about 48,000 lines

As the Mahabharata celebrates the lunar race of Delhi, so Outline of the Ramayana forms the epic chronicle of the solar race of the Rama Ajodhya or Oudh The two poems thus preserve the legends of two renowned Arvan kingdoms at the two opposite, or eastern and western, borders of the Middle Land (Madh) a-The opening books of the Ramavana recount the The local wondrous birth and boyhood of Rama, eldest son of Dasa legend ratha, King of Ajodhya, his marriage with Sita, as victor at her swayam zara, or tournament, by bending the mighty bow of Siva in the public contest of chiefs for the princess and his appointment as heir apparent to his father's kingdom zanana intrigue ends in the youngest wife of Dasaratha obtaining this appointment for her own son, Bharata, and in the exile of Rama, with his bride Siti, for fourteen years to the forest. The banished pair wander south to Pravag (Allah ábad), already a place of sanctity, and thence across the river to the hermitage of Valmiki, among the Banda jungles where a hill is still pointed out as the scene of their abode. Meanwhile Kima's father dies, and the loyal youngest brother, Bharata, although the lawful successor, refuses to enter on the inherit-

<sup>1</sup> The allegorical character of the Ramayana has allowed scope for various speculations as to its origin. Such speculations have been well dealt with by Mr Kashinath Trimbak Teling in his Essay, Has the Rámáyana cefud from Homer? (Bombay, 1875)

ance, but goes in quest of Ráma to bring him back as rightful heir. A contest of fraternal affection takes place. Bharata at length returns to rule the family kingdom in the name of Rama, until the latter shall come to claim it at the end of the fourteen years of banishment appointed by their late father.

The abduction of Sita

So far, the Rámayana merely narrates the local chronicles of the court of Ajodhya. In the third book the main story begins Ravana, the demon or aboriginal king of the far south, smitten by the fame of Sita's beauty, seizes her at the hermitage while her hasband is away in the jungle, and flies off with her in a magical chariot through the air to I anka or Ceylon. The next three books (4th, 5th, and 6th) recount the expedition of the bereaved Rama for her recovery. He makes alliances with the aboriginal tribes of Southern India, under the names of monkeys and bears and ruses a great army general Hanuman, jumps across the straits between India and Cevlon, discovers the princess in captivity, and leaps back with the news to Rama. The Monkey troops then build a cruseway across the narrow sea,—the Adam's Bridge of modern geography -by which Rama marches across and, after slaying the monster Rayana, delivers Sita. The rescued wife proves her urbroken chastity during her stay in the palace of Rayana, ly the ancient ordeal of fire. Agm, the god of that element, himself conducted her out of the burning pile to her husband, and, the fourteen years of banishment being over, Rama and Sita return in triumph to Ajodhya. There they reigned gloriously, and Rama celebrated the great horse sacrifice (aswa medha) as a token of his imperial swip over India. But a famine having smitten the land, doubts arose in Rama's heart as to his wifes purity while in her ciptors power at Cevion He banishes the faithful Siti, who winders forth again to Válmiki s hermitage where she gives birth to Rama's two sons. After sixteen years of exile, she is reconciled to her repentant husband, and Rama and Sita and their children are at last reunited 1

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The Mahabharata and the Ramavana, however overladen with fable, form the chronicles of the kings of the Middle Land of the Ganges, their family feuds, and their national enter prises. In the later Sanskrit epics, the legendary element is more and more overpowered by the inythological. Among them the Raghu vansa and the Kumara sambhava, both assigned to Kalidasa, take the first rank. The Raghu vansa

Rajhu Valina

<sup>&</sup>lt;sup>1</sup> Respectful mention should here be made of Growse's translation of the Illindi version of the Kámayana by Fulsi Das. (4'o. Allahabad, 1883.)

celebrates the solar line of Raghu, King of Ajodhya, more particularly the ancestry and the life of his descendant Rama The Kumára-sambhava recounts the birth of the War-god 1 Kumara It is still more didactic and allegorical, abounding in sentiment sambhava, and in feats of prosody. But it contains passages of exquisite beauty of style and elevation of thought. From the astrological data which these two poems furnish, Jacobi infers that they cannot have been composed before 350 AD

The name of Kalidasa has come down, not only as the Kalidasa composer of these two later epics, but as the father of the Sanskrit drama According to Hindu tradition, he was one of the 'Nine Gems' or distinguished men at the court of Vikramaditya This prince is popularly identified with the King of Ujjain who gave his name to the Samtat era, commencing in the year 57 BC. But, as Holtzmann points out, it may be almost as dangerous to infer from this latter circumstance that Vikramaditya lived in 57 BC, as to King Vk place Julius Casar in the first year of the so-called Julian ramaditya Calendar namely, 4713 BC Several Vikramadityas figure in Indian history Indeed, the name is merely a title, 'A very Sun in Prowess' which has been borne by victorious monarchs of many of the Indian dynasties The date of Vikramaditya has been variously assigned from 57 BC to 1050 AD, and the works of the poets and philosophers who formed the 550 4 D 2 'Nine Gems' of his court appear from internal evidence to have been composed at intervals during that long period. The Vikramidity? under whom Kalidasi and the 'Nine Gems' are said to have flourished, ruled over Milwa probably from 500 to 550 A D

In India, as in Greece and Rome, scenic representations Age of the seem to have taken their rise in the rude pantomime of a very diama early time, possibly as far back as the Vedic ritual and the Sanskrit word for the drama, nataka, is derived from nata, a dancer But the Sanskrit dramas of the classical age which have come down to us, probably belong to the period between the 1st century Bc and the 8th century AD They make mention of Greek slaves are acquainted with Buddhism in its full development, and disclose a wide divergence between Sanskrit and the dialects used by the lower classes The Maha-

1 Translated into spirited English verse by Mr. Ralph T. H. Griffith, M A, who is also the author of a charming collection of 'Idylls from the Sanskrit,' based on the Mahabh irata, Ramiyana, Raghu vansa, and Kali dasa s Seasons

bhárata and Ramáyana appear in the Sanskrit drama as part of the popular literature,—in fact, as occupying very much the same position which they still hold. No dramas are known to exist among the works which the Hindus who emigrated to Java, about 500 AD, curried with them to their new homes. Nor have any dramas been yet found among the Libetan translations of the Sanskrit classics.

Sakantala

The most famous drama of Kalidasa is Sakuntala, or the Lost Ring' Like the ancient epics, it divides its action between the court of the king and the hermitige in the forest Prince Dushvanta, an ancestor of the noble Lunar race, weds by an irregular marriage a beautiful maiden, Sakuntala, at her father's hermitige in the jungle Before returning to his capital, he gives his bride a ring as a pledge of his love, but smitten by a curse from a holy man, she loses the ring, and cannot be recognised by her husband till it is found tala bears a son in her loneliness, and sets out to claim recog n tion for herself and child at her husband's court. is as one unknown to the prince till, after many sorrows and trials, the ring comes to light. She is then happily reunited with her husband and her son grows up to be the noble Bharata, the chief founder of the Lunar dynasty whose achievements form the theme of the Mahabharata Sakun t 'a like Sita, is the type of the chaste and faithful Hindu whe and her love and sorrow, after forming the favourite romance of the Indian people for perhaps eighteen hundred years, have furnished a theme for the great I uropean poet of our age 'Wouldst thou,' says Goethe,

'Woulds then the young year's blossoms, and the fruits of its decline, And all by which the said is chainful, enraptured, feasted, fed,—Wouldst thou the earth and heaven itself in one said name combine? I name thee, O Sakuntala! and all at once is said.

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Sakunta's has had the good fortune to be translated by Sir William Jones (1789), and to be sung by Goethe. But other of the Hindu dramas and domestic poems are of almost equal interest and beauty. As examples of the classical period, may be taken the Mrichehakati, or 'Toy Cart,' a drama in ten acts, on the old theme of the innocent cleared and the guilty punished, and the poem of Nala and Damayanti, or the 'Royal Cambler and the Faithful Wife' Such plays and poems frequently take an episode of the Mahabharita or Rimdyana for their subject, and in this way the main incidents in the two great epies have been graduilly dramatized or reduced to the still more popular form of household song. The modern

## MODERN PLAYS OLD BEAST STORIES 127

drama was one of the first branches of Hindu secular literature and which accepted the spoken dialects, and the native theatre modern forms the best, indeed the only, school in which an Englishman can acquaint himself with the in-door life of the people

In our own day there has been a great dramatic revival Recent in India new plays in the vernacular tongues issue rapidly dramatic from the press, and societies of patriotic young natives form themselves into dramatic companies, especially in Calcutta and Bombay Many of the pieces are vernacular renderings of stories from the Sanskrit epics and classical dramas Several have a political significance, and deal with the phases of development upon which India has entered under the influence of British rule. One Bengali play, the Nil-darpan, or the 'Indigo Factory,' became the subject of a celebrated trial in Calcutta, while others—such as Ekei ki bale Sabhyata? 'Is this what you call civilisation?'—suggests many serious thoughts to a candid English mind. In 1877, 102 dramas were published in India in the native tongues, and in 1882, 245

Closely allied to the drama is the prose romance In 1823, The Dr H H Wilson intimated that Hindu literature contained Hirdu collections of domestic narrative to an extent surpassing those of any other people. The vast growth of European fiction since that date renders this statement no longer accurate. But Wilson's translations from the Vrihat katha may still be read with interest,2 and the Sanskrit Beast stories now occupy an Beast even more significant place in the history of Indo-European stones, literature than they did then Many fables of animals familiar to the western world, from the time of Æsop downwards, had their original home in India The relation between the fox and the lion in the Greek versions has no reality in nature. It was based, however, upon the actual relation between the lion and his follower the jackal, in the Sanskrit stories 3. Weber thinks that complete cycles of Indian fables may have existed in the time of Panini (350 BC) It is known that the Sanskrit Pancha tantra, or Book of Beast Tales, was translated into the ancient their Persian as early as the 6th century AD, and from that render spread ing all the subsequent versions in Asia Minor and Furope have wards been derived. The most ancient animal fables of India are at

1 Literally, 'The Mirror of Indigo

<sup>2</sup> Oriental Quarterly Magazine, Calcutta March 1824, pp. 63-77. Also vol. in. of Wilson's Collected Works. pp. 156-208. London, 1864.

<sup>&</sup>lt;sup>3</sup> See, however, Weber's claborate footnote No 221, for the other view, *Hist Ind Lit*, p 211 Max Muller's charming essay on the Migration of Fables (*Chips*, vol 1v pp 145-209 1875) traces the actual stages of a well known story from the Last to the West

the present day the nursery stories of England and America The graceful Hindu imagination delighted also in fairy tales, and the Sanskrit compositions of this class are the original source of many of the fairy tales of Persia, Arabia, and Christendom The works of fiction published in the native languages in India in 1877 numbered 196 and in 1882, 237

In mediæval India, a large body of poetry, half-religious, halfamorous grew up around the legend of the youthful Krishna (the eighth incurnation of Vishnu) and his loves with the shepherdesses, the playmates of his sweet pastoral life Kálidisa, according to Hindu tradition was the fither of the erotic lync, as well as a great dramatic and epic poet his Megha-duta or 'Cloud Messenger,' an exile sends a message by a wind-borne cloud to his love and the countries beneath its long aerial route are made to just like a panorama before the reader's eve. The Gia Govinda or Divine Herdsman of Invadeva, is a Sanskrit 'Son, of Solomon' of the 12th century AD. A festival once a year celebrates the birthplace or this mystical love poet in the Birbhum District of Lower Bengal and many less famous compositions of the same class now issue from the verracular press throughout India In 1877, no fewer than 697 worls of poetry were published in the native languages in India and in 1882 834

The medieval Brahmans displayed a marvellous activity in theological as well as in lyric poetry. The Puranas, literally The Anciert Writings form a collection of religious and philosophical treatises in verse, of which the principal ones number The whole Puranas are said to contain 1,600 000 The really old ones have either been lost or been incorporated in new compilations, and the composition of the existing Puranas probably took place from the 8th to the 16th century A.D. As the epics sang the wars of the Aryan heroes, so the Puranas recount the deeds of the Brahm in gods. They deal with the creation of the universe, its successive dissolutions and reconstructions, the stories of the deities and their incarnations, the reigns of the divine Minus, and the chronicles of the Solar and Lunar lines of kings who ruled the former in the east and the latter in the west of the Middle Land (Madhya-dcsha)

The Puranas belong to the period after the mass of the people had split up into their two existing divisions, as worshippers of Vishnu or of Siva, post, 700 AD. They are

devoted to the glorification of one or other of these two rival gods, and thus embody the sectarian theology of Bráhmanism While claiming to be founded on Vedic inspira-Their tion, they practically superseded the Veda, and have formed influence during ten centuries the sacred literature on which Hinduism rests 1

An idea of the literary activity of the Indian mind at the Indian present day may be formed from the fact, that 4890 works were works published in India in 1877, of which 4346 were in the native in 1877 languages Only 436 were translations, the remaining 4454 being original works or new editions The number of Indian publications constantly increases In 1882, 6198 works were and 1882 published in India, 5543 being in the native languages The translations numbered 720, and the original works, including new editions, 5478 These figures only show the publications officially registered under the Act A large number of unregistered pamphlets or brochures must be added. together with the daily and weekly issue of vernacular newspapers, exceeding 230 in number and circulating over 150,000 copies

This chapter has attempted to trace the intellectual and Vi ence of religious development of the early Aryans in India, and their terri orial constitution into castes and communities. Regarding their his ory territorial history, it has said almost nothing. It has, indeed, indicated their primeval line of march from their Hoiy Land among the seven rivers of the Punjab, to their Land of the Sacred Singers between the upper courses of the Jumna and the Ganges, and thence to their more extensive settlements in the Middle Land of Bengal (Madhia desha) stretching to beyond the junction of these two great rivers. It has also told very briefly the legend of their advance into Southern India, in the epic rendering of the Ramayana. But the foregoing pages have refrained from attempts to tix the dates or to fill in the

1 The foregoing pages have very briefly reviewed the most important branches of Sanskrit literature, the influence of that literature upon Hinduism will be dealt with in a subsequent chapter. To fully appreciate the connection between ancient thought and present practice in India, the student may also refer to Professor Monter Williams Monten In na end to Indians (Trubner, 1579) That work unites the keen observation of a traveller new to the country with the previous learning acquired during a lifetime devoted to Oriental studies Professor Monier Williams is thus enabled to correlate the existing phenomena of Indian life with the historical types which underlie them

VOL. VI

details of these movements. For the territorial extension of the Aryans in India is still a battle-ground of inductive history

Its induc-

Even for a much later period of Indian civilisation, the data continue under keen dispute. This will be aimply apparent in the following chapters. These chapters will open with the great upherval of Buddhism against Brahmanism in the 6th century before Christ. They will summarize the struckles of the Asiatic aces in India during a period of twenty three hundred years. They will close with the great military regival of Hinduism under the Varitha Brahmanis in the 18th century of our era. An attempt will then be made, from the evidence of the vernacular laterature and languages to present a view of Indian thought and culture, when the European nations came it force upon the scene.

The Bi a mans in Indian h s ory Meanwhile, the history of India, so far as obscurely known to us before the agreet of the Greeks, 327 f.c., is essentially a literary listory and the memorials of its civilisations are mainly literary or religious memorials. The more practical aspects of those long ages which were their real aspects to the people found no annalist. From the commencement of the post Vedic period, the Brahmans strove with increasing secess to bring the Arvan lite and civilisation of India more and more into accord with their own priestly ideas.

In order to underseind the long domination of the Brahmans, and the influence which they still wield it is necessary also to keep in mind their position as the great literary cast. Their priestly supremacy has been repeatedly assilled, and was during a space of nearly a thousand years overpowered by Buddhism But throughout twenty two centuries the Brahmans have been the counsel ors of Handu princes and the teachers of the Handu people. They still represent the early Ary in civilisation of India. Indeed, the essential history of India is a narrative of the attacks upon the continuity of their civils ation,—that is to say of attacks upon the Brahmanical system of the Middle Land, and of the modifications and compromises to which that system has had to submit

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Namely, on Palidhism, the Greel's in India tre Seythic Intends, the I seef Hindurin, I give Muhammadan Relea the Mughal Impire, and the Marcha Power. We still two the coupling evidence of come and its riptions, although valuable materials have been alterly of functional from a salar memorials of the part. Mr. K. I. I change Introduction to the Mutricianian with Appenhix, shows what can be gathered from a minute action repleximenation of the historical data incidentally contained in the Harra drama.

Those attacks mark out six epochs First, the religious up- I Buddh rising of the non-Aryan and the partially Brahmanized Aryan ism tribes on the east of the Middle Land of Bengal, initiated by the preaching of Buddha in the 6th century BC, culminating in the Buddhist kingdoms about the commencement of our era, and melting into modern Hinduism about the 8th century A D Second.warlike inroads of non-Brahmanical Aryans and Scythic 2 Greeks. races from the west, strongly exemplified by the Greek invasions and in the 4th century BC, and continuing under the Greco-Bactrian empire and its Scythic rivals to probably the 5th century A D Third, the influence of the so-called aborigines or non-Aryan 3 Non tribes of India and of the non-Aryan low-castes incorporated Aryan into the Hindu community, an influence ever at work—indeed by far the most powerful agent in dissolving Bráhmanism into Hinduism, and specially active after the decline of Buddhism about the 7th century A D

Fourth, the reaction against the low beliefs, priestly oppres-4. Hindu sion, and bloody rites which resulted from this compromise sects between Brahmanism and aboriginal worship. The reaction received an impetus from the preaching of Sankar Acharya, who founded his great sivaite sect in the 5th century AD. It obtained its full development under a line of ardent Vishnuite reformers from the 12th to the 16th centuries AD. The fifth solvent of the ancient Brahmanical civilisation of 5 Muham India was found in the Muhammadan invasions and the rule madan of Islam, 1000 to 1765 AD. The sixth, in the English 6 English supremacy, and in the popular upherval which it has produced in the 18th and 19th centuries. Each of these six epochs will, so far as space permits, receive separate treatment in the following chapters.

## CHAPTER V

## FUDDHISM IN INDIA (543 BC TO 1000 AD)

Bud lin n The first great solvent of Brihmanism was the teaching of Gautama Buddha The life of this celebrated man has three sides,—its personal aspects, its legendary developments, and its religious consequences upon mankind. In his own person, Buddha appears as a prince and preacher of ancient India In the legendary developments of his story, Buddha ranks as a divine teacher among his fillowers, as an incarnation of Vishnu among the Hindus and as a saint of the Christian Gau ama Ru k'ha church, with a day assigned to him in both the Greek and Roman calendars. As a reagious founder, he left behind a system of belief which his gained more disciples than any other creed in the world, and which is now more or less accepted by 500 millions of people or nearly one half the hu nan race. According to the Pali texts, Buddha was born 622 I C., and died 543 I C. Modern calculations fix his death about 480 BC -

The story of Bal na mislel'el type

The story of Buddha's earthly cacer is a typical one. It is based on the old Indian ideal of the noble life which we have nthe cric scen depicted in the Sinskrit epics. Like the Pindivis in the Mahabharata, and like Rama in the Ramavana. Buddha is the miraculously born son of a king, belonging to one of the two great Arvan lines, the Solar and the I un r in Buddha sease, as in Rama -, to the Solar His youth, like if it of the core heroes, is spent under Brahman tetors, and like the eye heroes he obtains a heautiful bride after a display of unexpected provess with the bow or, as the northern Buddhists relate, at an actual swaram rara, by a contest in arms for the princess. A period of voluntary exile follows an interval of married happiness, and Buddha retires like Rama to a Brahman shermitage in the forest

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The sending back of the charioteer to the bereaved father's capital forms an episode in the story of both the young princes As in the Ramayana, so in the legend of Buddha, it is to the

Chillers Dutionar of the Pa t I m, wage, vv I ud ho, p 96 (11) entergy buddha, Seen I et en etc (Hoey's excellent translation, p 197) Vade post, p 153

jungles on the south of the Ganges, lying between the Aryan settlements and the aboriginal races, that the royal exile repairs. After a time of seclusion, the Pándavas, Ráma, and Buddha alike emerge to achieve great conquests, the two The former by force of arms, the last by the weapons of the Spirit Indian legend Up to this point the outline of the three stories has followed the same type, but henceforth it diverges. The Sanskrit epics depict the ideal Aryan man as prince, hermit, and hero the legend of Buddha, that ideal has developed into prince, hermit, and saint.

Gautama, afterwards named Buddha, 'The Enlightened,' Parentage and Siddhartha, 'He who has fulfilled his end,' was the only of Gau son of Suddhodana, King of Kapilavastu This prince, the Buddha chief of the Sakya clan, ruled over an outlying Aryan settlement on the north eastern border of the Middle Land, about 622 BC a hundred miles to the north of Benares, and within sight of the snow topped Himalayas A Gautama Raiput of the noble Solar line, he wished to see his son grow up on the warlike model of his race But the young prince shunned the His lonely sports of his playmates, and retailed to solitary day-dreams in routh, at nooks of the palace garden The king tried to win his son to a practical career by marrying him to a beautiful and talented girl, and the youthful Gautama unexpectedly proved his manliness by a victory over the flower of the young chiefs at a tournament For a while he forgot his solemn speculations on the unseen, in the sweet realities of early married life

But in his drives through the city he deeply reflected His mar on the types of old age, disease, and death which met ried life, his eye, and he was powerfully impressed by the calm of a holy man who seemed to have raised his soul above the changes and sorrows of this world. After ten years, his wife bore to him an only son, and Gautama, fearing lest this new tie should bind him too closely to the things of earth, retired about the age of thirty to a cave among the forest-clad spurs of the Vindhyas The story of how he turned away from the His Great door of his wife's lamp lit chamber, denying himself even a Renuncia parting caress of his new-born babe lest he should wake the 29-30 sleeping mother, and galloped off into the darkness, is one of the many tender episodes in his life. After a gloomy night ride, he sent back his one companion, the faithful charioteer, with his horse and jewels to his father. Having cut off his long Rájput locks, and exchanged his princely rument for the rags of a poor passer-by, he went on alone a homeless beggar This abandonment of earthly pomp and power, and of loved

wife and new-born son, is the Great Renunciation which forms a favourite theme of the Buddhist scriptures in Sanskrit, Pah, Tibetan, and Chinese It has furnished, during twenty ec ituries, the type of self sacrifice which all Indian reformers must follow if they are to win the trust of the people

Buddhas torest life r' 30-36 or 29-34

For a time Ruddha studied under two Brahman recluses, near RAJACRIHA, in Pitna District learning from them that the path to divine knowledge and tranquillity of soul lies through the subjection of the flish. He then buried himself deeper in the south eastern jungles, which at that time covered Gava District, and daring six years wasted himself by austerities in company with five disciples. The temple of BLDDH (1444 marks the site of his long penance. But instead of earning peace of mind by fasting and self-torture, he reached a crisis of religious despair during which the Buddhist scriptures affirm that the enemy of mankind, Mara wrestled with him in bodily share. Torn with doubts as to whether, after all his penance he was not destined to perdition, the hageard ascetic, in a final paroxism fell senseless to the earth

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When he recovered the mental struggle had passed felt that the path to savation lay not in self-torture in a mountain case but in preaching a higher life to his fellow-His five discribes, shocked by his giving up penance forsook him and Buddha was left in solitude to free the ones tion whether he alone was right and all the desout minds of his age were wrong The Puddh st ser, tures depict him as sitting screen under a fig-tree, while the great I nemy and his crew whirled round ham with flaming were ons 'When the conflict began between the Saviour of the World and the Prince of Full says one of their sicred texts the earth shook the sea uprose from her bed, the riv is turned back to the mourtains the hill tops tell crishing to the plains the sen was darkened and a host of headless spirits rode upon the tempest I rom his temptation in the wilderness the ascetic emerged with his doubts for ever laid at rest seeing his way clear and henceforth to be known as Luddha, literally 'The I nlightened -This was Buddha's second birth, and the pipal fig or

Bo (Bedla), literally the Irec of the Inlightenment, under whose spreading branches its pangs were endured, has become

The Ma suratiba Vs essen, Jenonal of the Iron at I lat e So lety, vol. vit 1 512 Rhys Dav ds Buddham, p 36

<sup>2</sup> According to the C ylone e texts Buddha (chained Buddhahood) in 558 1 This would make him 34, not 36 years of age. Children Pult Dutionary, 12 Buildho

the sacred tree of 500 millions of mankind. It is the Ficus religiosa of Western science The idea of a second birth was familiar to the twice-born Aryan castes of ancient His story India, and was represented by their race-ceremony of in-follows the old Aryan vesting the boy at the close of childhood with the sacred types thread In this, as in its other features, the story of Buddha adheres to ancient Aryan types, but gives to them a new spiritual significance Having passed through the three prescribed stages of the Aryan saintly life,—as learner, householder, and forest recluse,—he now entered on its fourth stage as a religious mendicant. But he developed from the old Brahmanical model of the wandering ascetic, intent only on saving his own soul, the nobler type of the preacher, striving to bring deliverance to the souls of others

Two months after his temptation in the wilderness Buddha Public commenced his public teaching in the Deer-Forest, on the teaching of Buddha, outskirts of the great city of Benares Unlike the Brahmans at 36-80 he addressed himself, not to one or two disciples of the sacred caste, but to the mass of the people His first converts were laymen and among the earliest were women. After three months of ministry, he had gathered around him sixty disciples, whom he sent forth to the neighbouring countries with these He sends words 'Go ve now and preach the most excellent I aw' The for h the essence of his teaching was the deliverance of man from the sins and sorrows of life by self-renunciation and inward selfcontrol. While the sixty disciples went on their missionary tour among the populace. Buddha converted certain celebrated hermits and fire worshippers by an exposition of the philo sophical side of his doctrine. With this new band he journeyed on to Rajigriha, where the local king and his subjects joined the faith but where also he first experienced the fickleness of the multitude. I wo thirds of each year he spent as a windering preacher. The remaining four months of the rainy season he abode at some fixed place often near Rajagriha, teaching the people who flocked around his little dwelling in the bamboo grove. His five old disciples who He con had forsaken him in the time of his sore temptation in the eristhe wilderness, penitently rejoined their master Princes, mercliants, artificers, Brahmans and hermits, husbandmen and serfs, noble ludies and repentant courtesans, were yearly added to those who believed

Buddha preached throughout a large part of Behar, in the Oudh, and the adjacent Districts in the North Western Gange'ie Provinces In after ages monasteries marked his haltingplaces, and the principal scenes of his life, such as AJODHVA, BUDDH-GAVA, SRAVASII, the modern SAHFI MAHII, RAJAGRIHA, etc., became the great places of pilgrimage for the Buddhist world. His visit to his aged father at Kapilavastu, whence he had gone forth as a brilliant young prince, and to which he returned as a windering preacher, in dingy rellow robes, with shaven head and the begging bowl in his hand, is a touching episode which appeals to the heart of universal mankind. The old king heard him with reverence. The son whom Buddha had left as a new born babe, was converted to the faith and his beloved wife, from the threshold of whose chamber he had ridden away into the garkness became one of the first of Buddhist nuns.

The Great Renunciation took place in his twenty ninth year After silent self-preparation, his public ministry commenced in his thirty sixth and during forty four years he preached to

Buddha converhis own family

Hepe pheres is death

t<sup>1</sup>eath

List works 543 B C

1 hfferer

versions of the

Legend

the people. In prophesim, his death, he said to his iollowers. Be exprest be thoughtful, be note. Keep stedfast watch over your own hears. He who holds tast to the law and discipline, and faints not he shail cross the ocean of life and make an end of sorrow. He spent his last night in preaching and in comforting a weeping disciple, his latest words, according to one account were, 'Work out your salvation with difference. He died climbs, at the age of eighty under the hadow of a figure, at Kusinagara, the modern Kasia, in Gerakhour District

Such is the story of Gautama Buddha's life derived from Indian sources a story which has the value of gospel truth to 31 milnons of devout believers. But the two branches even of Indian or Southern Buddhism have each their own version, and the Buddha of the Burmese diners in important respects from the Buddha of the Ceylonese. Still wider is the diver

According to some accounts, according to others, at about seventy But the chronology of Bu liha sinfe is legen lary

<sup>2</sup> The following is imate is given by Mr. Rhys Davids of the number of the Southern Buddhists, substituting for his Indian figures the results a ce, aimed by the Census of 1581.—

In Ceylor,		1,520,575
, India and British Burma,		marly 4,000,000
, Lurma,		3 000 000
, mixin,		10,000 000
,, Atam,		12,000,000
, Jan »,		485 020
	lotal,	31,005,595

<sup>3</sup> The original Pali text of the Commentary of the Jatakhus is assigned

gence which the Northern or Tibetan Buddhists give to the legend of the life and to the teaching of their Master. The southern texts dwell upon the early career of Buddha up to the time of his Enlightenment in his 34th or 36th year. The incidents of that period have a peculiar pathos, and appeal to the most sacred experiences of humanity in all ages. They form the favourite episodes of European works on Buddhism. But such works are apt to pay perhaps too little attention to the fact that the first thirty-four years of Buddha's life were only a self preparation for a social and relig ous propaganda prolonged to an extreme old age.

The forty-six years of intense personal labour, during which Later Buddha traversed wide regions, converted nations, withstood Buddha kings, eluded assassins, and sifted out false disciples, receive more attention in the northern legends. These legends have lately been compiled from the Tibetan texts into a work which furnishes a new and most interesting view of Buddha's life. The best authority on the Southern Buddhism of Burma states that the history of the Master 'offers an almost complete blank as to what regards his doings and preachings during a period of nearly twenty-three years'-

The texts of the Northern Buddhists fill up this blank Northern

Southern Buddhism modelled its biographies of the Master Texts to Ceylonese scribes, ii 450 a D. The ris part of it was published in Fausboll in 1875 (Copenhagen) and Mr. Rhys Davids' translation, with valuable introduction and notes, appeared under the ritle of Buddhis' Birth Stries in 1880 a Frederic London. Mr. Childers. Prevention of the Prevention of the Stries in 1880 a Frederic London. Mr. Childers. Prevention of the Prevention as storehouse of engined materials from Ceronese sources, and has been used for verifying all statements in the present chapter. A compendion view of Southern I and thism ancient and modern, will be found in Spence Hardy's Manual of Buddhism, translated from Singalese. Ms. The Burmese branch of Son hern buddhism is well represented by It shop Buganders. Ithe I Locata of the anna (third edition, 2 vols I rubner, 1880), and by Mr. Alabasters. Ithe Wined of the Law, a triuslation or paraphrase of the Stamese Patrama Samonanyan. Mr. Khys Davids. Buddhism, and his Ilt. et Latines, give an excellent review of the faith. The French works the original authorities in Europe have (in

some respects) been superseded by Oldenberg's Burana, Sein Leben etc. 1 The Life of the Bundia ar I t e Eas 1 His ory of his Order, aerical from Libitan Works in the Bean 1 for an I Bran negar, translated by Woodville Rockhill, Second Secretary to the United States Legation in China (Trubner & Co. 1 ondon 1884). Mr. Beal's Staukt, or Buddhist Records of the West in 11 nd, trunslated from the Chinese of Hiuen Islung, throws curious side lights upon the truditions which the Chinese pilgrim brought with him or heard in India regarding the local incidents of Buddha's life

- From the tity sixth to the seventy minth year of his life Bishop Bisandet's Life or Legend of Gaudama, vol 1 p 260, and footnote

upon the Indian epic type. Such biographics, as already stated, reproduce the three stages in the life of an Arvan hero, depicted by the Mahabharata and Ramayana except that the three ideal stages have developed from those of prince, hermit, and warrior, to those of prince hermit, and saint. In the northern conditions of China and Tibet, Buddha appears by no means as an Arvan hero. He is rather the representative of a race with birth-customs and death rites of its own—of a race dwelling amid the epic Aryan kingdoms of Inda, but with traces of a separate identity in the past. He is a Sakya (perhaps a Section) prince, whose clar had settled to the south of the Hindaya, and preserved relies of a non Arvan type.

In art need character which the southern legends give to the ide of Budaya prose from their tendency to assimilar num we nepic Indian types. It was intensified by the could's Indian tendency to convert actual (1) is into philosophical distractions Gratima or Sakva Muni become only a fink in a long scries of vist men made perfect. According to the Carlonese texts a Bacaha is a hum in being woo i as obtained perfect self-control and minute knowledge. Having attained I nlighterment himself, he spends the rest of his life in preaching the truth to others At his de to he is re-unorbed into the Div ne I ssence, and tis real or flourishes for a celt in period in 1 titles cut, and a new Liddha appears to preach anew are lost truth. The attainment of Bunda, hood is the first result of viring amusel, significe curing Innumerable biddies have been born many prevous lives in this works, 24 of whom are separately named. Gardina was only the latest and his doctrine is desirred to give, face to the Metters Buddha of Buddha of Kindness who is next to come 1

The Baddha of the northern legends is a reformer of a more concrete type. The Tibetan texts give a romanence to the 10 it cal aspects of his Reformation. Incident the indeed, they amplify several of the touching episodes fracture to Southern Buddhasin. The farent lear which impelled the young prime tooth from his palace into the largues to seek a higher life, the dirt and stones thrown at the winderer by the village girls the parables of the Mango tree, the Descut Slave, and many others, the rich young man who left all for the futh and was not exceeding sorry, and Buddhas own retirement from benares to avoid the gifts and horours which were being thrust upon him, receive fresh illustration from the Tibet in texts?

Mr (m urs' Par Dutonar) 3 % St ki , Writaga

The mater its for the following purery is are derived mainly from
Mr Kockhill's work (1884), alically cite!

But it is from the political and historical aspects that the Political Tibetan life of Buddha possesses its special value We learn life of Buddha that Buddhism was in its origin only one of many conflicting sects, indeed, that alike to its royal patrons and opponents it appeared at first in the light of a new order rather than in the light of a new faith 1. The early struggles of Buddhism were neither with the old Aryan gods, nor with the Brahmans as a caste but with rival orders of philosophers or ascetics, and with schismatics among its own followers. The gods of the Veda, Brahma, Indra, and the Shining Ones, appear in friendly relations with Buddha, and attend upon him in more than one crisis of his life. The Brahmans were no longer a caste alto gether devoted to a spiritual life. The Tibetan texts disclose them as following partly religious, partly secular avocations, and as among 'the great nobles' of an Indian kingdom Brahman attitude to the new futh was by no means one of con-The main body of Brahmans continued nonfederate hostility Buddhistic, and taught their doctrines at roval courts. But many constitutions converts were drawn from among them, and the Liberan texts almost uniformly speak of Brahmans with respect

The opponents of the Tiberan Buddha were man sees Bu thas whom he found in possession of the field and the false real brethren who arose among his own disciples The older hostile sects were confuted, sometimes by fair discussion, but more often by superior magical feats. Indeed transformations and miraculous appearances seem for a time to have furnished the most potent arguments of the new faith. But eventually Buddha forbade resort to such testimonies, and majic became to the orthodox Buddhist an unholy art. In his later years Buddha more than once insists that his doctrine is essentially one to be understanded of the people that he was keeping back His no secret for an initiated tew and that he was the preacher magical of a strictly popular religion without any esoteric side

It was from among his own disciples that his bitterest enemies came. The bakin race of Kapilarastu had adopted his teaching as a nation without much pretence of individual conversion. Buddha's modest beginnings, first with the five followers, then with the sixty, then with the thousand now Wholesale took a national development. In the terrour of the new Sakva movement, the Sakyas proclumed that one man out of every family must enter the Buddhist mendicant order and it was from this ordinance, to which Buddha was compelled to give a reluctant assent, that the troubles of his liter life arose

1 Rockhill, op cit. Also Rhys Davids Hi cert Le times, p. 150

Schism of

The discontent among the forced disciples found a leader Devadatta. in Buddha's own cousin, Devadatta, who aspired by superior asceticism to the headship. For the schism which he created, Devadatta won the support of the Heir-apparent of Magadha A struggle, parth religious partly political, ensued Devadatta was for a time triumphant. He abotted the murder of the Magadha king, the fither of his ally, forced the aged Buddha into retirement and plundered and oppressed the people The mirroulous deliverances of 'the Blessed One' from the catapult and from the wild elephant let loose against him in a narrow street, mark, however, the turning-point in the fortunes of the schism. Devadatta was contuted by magical arts and his royal patron was converted to the true futh disciple having thus failed to usurp the spiritual leadership of the Sakva- attempted to seduce the wife whom Buddha had lett in solitude. The apostate hot ed with her aid to stand forth as the king or temporal leader of the Sakya race contemptuous rejection by the loval Sakva princess, his acts of despairing cruelty and his fall into hell with a le in his mouth. fith close the career of the first great schismatic

His fall into heil

I addha t te Sakta prince

Throughout the Liberan texts, Buddha figures as a typical Saky? first as a young K-hat rive or prince of the royal line. at a then as a saintly personage who turns back an army sent against his nation by the force of his picty alone spiritual weapons, however, proved a feeble defence in early Lyentually, the Sakya capital was attacked by overwhelming numbers. For a time the enemy were repulsed without the Buddhists incurring the sin of taking life. But their firm adherence to their Master's commandment, 'Thou shalt not kill,' in the end decided the fate of the Sakya city Some escaped into exile and founded settlements in distant parts as far as the other side of the Punjab frontier. The fall of the city ended in the slaughter of 77,000 Sakyas, and in the dispersion of the remnants of the rice. The story of the five hundred Sakya youths and five hundred Sakya maidens who were carried into captivity is a pathetic one of he race hundred youths were massacred in cold blood, and the faithful Sakva maidens, having refused to enter the ligrem of their conqueror, were exposed to the populace with their hands and feet chopped off How Buddha came to them in their misery, dressed their wounds, and comforted them with the hope of a better life, 'so that they died in the faith,' is affectingly told

The foregoing narrative touches only on one or two aspects of the Libetan texts. It suffices to show the characteristic

divergences between the northern and the southern legend Other In the northern, there is a gradually developed contrast be- aspects of the tween two main figures, the traitor Devadatta and his brother Tibetan Ananda, the Beloved Disciple The last year of Buddha's Legend ministry is dwelt on by both But its full significance and its most tender episodes are treated with special unction in the northern version of the Book of the Great Decease The Fo-weikian king,1 or 'Dying Instruction of Buddha,' translated into Chinese between 397 and 415 AD from a still earlier Sanskrit text, gives to the last scene a peculiar beauty 'It was now in the Chinese middle of the night,' it says, 'perfectly quiet and still for the sake text of Buddha's of his disciples, he delivered a summary of the law ' After laying disdown the rules of a good life, he revealed the inner doctrines of course his faith From these a few sentences may be taken 'The heart is lord of the senses govern, therefore, your heart, watch well the heart.' 'Think of the fire that shall consume the world, and early seek deliverance from it' 'Lament not my going away, nor feel regret For if I remained in the world then what would become of the church? It must perish without fulfilling its end From henceforth all my disciples, practising their various duties, shall prove that my true Body, the Body The of the Law (Dharmakara), is everlasting and imperishable doctrines of Buildha The world is first bound in fetters, I now give it deliverance, as a physician who brings heaven's medicine. Keep your mind on my teaching, all other things change, this changes not. No more shall I speak to you I desire to depart desire the eternal rest (Nirtuna) This is my last exhortation

The secret of Buddha's success was that he brought spiritual deliverance to the people. He preached that salvation was courlly open to all men, and that it must be earned not by propitiating imaginary deities but by our own conduct doctrines thus cut away the religious basis of caste, impaired the efficiency of the sacrificial ritual, and assailed the supremicy of the Brahmans as the mediators between God and man taught that sin, sorrow, and deliverance, the state of a man in this life, in all previous and in all future lives, are the inevitable results of his own acts (Karma) He thus applied the inexorable law of Law of cause and effect to the soul What a man sows, he must reap Karma

As no evil remains without punishment, and no good deed without reward, it follows that neither priest nor God can prevent

<sup>&</sup>lt;sup>1</sup> Translated in Appendix to the Catalogue of the Manuscripts presented by the Japanese Government to the Secretary of State for India, and now in the India Office - Concluding letter of Mr Beal to Dr Rost, dated 1st September 1874, sec 5

each act bearing its own consequences. Misery or happiness in this life is the unavoidable result of our conduct in a past life, and our actions here will determine our happiness or misery in the life to come. When any creature dies he is born again in some higher or lower state of existence, according to his merit or dement. His merit, or dement, that is his character, consists of the sum total of his actions in all previous lives.

By this great law of Karma, Buddha explained the inequalities and apparent injustice of many estate in this world as the consequence of acts in the past while Christianity compensates those inequalities by rewards in the future. A system in which our whole well being past, present and to come, depends on ourselves, theoretically leaves little room for a interference, or even existence, of a personal God<sup>1</sup>. But the acheism of Buddha was a philosophical tenet, which so far from weakening he sanctions of a thrond wrong give them in wistenach from the doc me of A rma, or the Metem psychosis of Character.

T cle

Nim 12

To free ourselves from the tirth form of desire and from the feeters of selfishness was to and to the state of the perfect a sciple, Arahar in this life and to the everlisting rest after death Air ina Some Bildahists explain Aircana as absolute in cilation, when the soul is blown out like the flime of a lamp. Omers hold that it is merely the extinction of the sins sorrews and selfishness of individual life. The fact is, that the appearant underwent processes of charge and developmert lke all theological dogmas. But the earliest idea of Virtini, says one of the greatest at horities on Chinese Bud hism, 'scens to have included in it no more than the enjoyment of a scite of rest consecient on the extinction of all causes of sorrow - The great proctical aim of Buddhas te iching was to subdue the lusts of the firsh and the cravings of self and Norwall has been taken to mean the extinc tion of the sinful grasping condition of heart which, by the inevitable law of Karma, would involve the penalty of renewed individual existence. As the Buddhist strove to reach a state of quictism or how meditation in this world, namely, the

"Hullihism," as Mr. I. al. Culena. On that Virgiture, p. 1536, secures itself ignorant of any mode of term but existence compatible with the rica of spiritual perfection, and so firm it is ignorant of test."

I cal, eatend of findthist Scripture from the Cainese, p. 157, cd. 1871 and the Bushinst Tripitula App. Later to Dr. Rost see 6. Max. Miller deals with the word from the etymological and Sanskist side in his 6. ps. from a German 18-17 kap, vol. 1. pp. 279, 290, ed. 1807. But see, pec a. v. Childer, Pili Dutiona. (18) Nilbanam, pp. 265-274.

state of the perfect disciple or Arahat, so he looked forward to an eternal calm in a world to come, Nirvána

Buddha taught that this end could only be attained by the Moral practice of virtue He laid down eight precepts of morality. ccde with two more for the religious orders, making ten commandments (dasa sila) in all He arranged the besetting faults of mankind into ten sins, and set forth the special duties appli- The Ten cable to each condition of life, to parents and children, to ments pupils and teachers, to husbands and wives, to masters and servants, to laymen and the religious orders. In place of the Brahman rites and sacrifices, Buddha prescribed a code of practical morality as the means of salvation essential features of that code were—reverence to spiritual teachers and parents, control over self, kindness to other men, and reverence for the life of all sentient creatures

He urged on his disciples that they must not only follow Missionary the true path themselves, but that they should preach it to all aspects of Buddhism Buddhism has from the first been a missionary religion. One of the earliest acts of Buddha's public ministry was to send forth the Sixty, and he carefully formulated the four chief means of convers on These were companionship with the good, listening to the Law, reflection upon the truths heard and the practice of virtue. He also instituted a re-I gious Order, one of whose special duties it was to go forth and preach to the nations While, therefore, the Brahmans kept their ritual for the twice born Aryan castes, Buddhism addressed itself not only to those castes and to the lower mass of the people, but to all the non-Arran races through out India, and eventually to almost the whole Asiatic world I wo features of the Buddhist Order were its fortnightly

meetings and public confession, or 'Disburdenment' of sins On the death of Buddha, five hundred of his disciples met The First in a vast cave near Rangriha to gather together his savings Council, This was the First Council They chanted the lessons of their master in three great divisions—the words of Buddha to his disciples, 1 his code of discipline 2 and his system of doctrine 8 These became the Three Collections 4 of Buddha's teaching, and the word for a Buddhist Council<sup>5</sup> means literally 'a singing together' A century afterward, a Second Second Council, of seven hundred, was held at Vaisali, to settle disputes Council, between the more and the less strict followers of Buddhism 413 B C (2) It condemned a system of ten 'Indulgences' which had grown

<sup>3</sup> Abnudhar ma 1 Sulvas 2 I mana 4 Pitakas, lit 'baskets,' afterwards the five Askayas 5 Sangiti in Pau

up, but it led to the separation of the Buddhists into two hostile parties, who afterwards split into eighteen sects.

Third Buddhist Council,

During the next two hundred years Buddhism spread over Northern India, perhaps receiving a new impulse from the Greek 244 B C (?) Lingdoms in the Punjab About 257 B C., Asoka, the King of Magadha or Behar, became a zealous convert to the faith 1 Asoka was grandson of the Chandra Gupta whom we shall meet as an adventurer in Alexander's camp, and afterwards as an ally of Asoka is said to have supported 64,000 Buddhist priests, he founded many religious houses, and his kingdom is called the Land of the Monasteries (Vihara or Behar) to this day

The work cf Asoka.

Asoka did for Buddhism what Constantine afterwards effected for Christianity, he organized it on the basis of a State reli-This he accomplished by five means—by a Council to settle the faith, by edicts promulgating its principles, by a State Department to watch over its purity, by missionaries to spread its doctrines, and by an authoritative revision or canon of the Buddhist scriptures In 244 BC., Asoka convened at Patna the Third Buddhist Council, of one thousand elders Evil men, taking on them the yellow robe of the Order, had given forth their own opinions as the teaching of Buddha Such heresies were now corrected, and the Buddhism of Southern Asia practically dates from Asoka's Council

(I) His Great Co incil

> 1 Much learning has been expended upon the age of Asoka, and various dates have been assigned to him. But, indeed, all Buddhist dates are open questions, according to the system of chronology adopted. The middle of the 3rd century BC may be taken as the era of Asoka. The following table from General Cunningham . Corpus Inscriptionum Inau irum, p vii (1877), exhibits the results of the latest researches on this subject -

вс <b>264</b>	Asoka, Struggle with brothers, 4 years
260	Comes to the throne
257	Conversion to Buddhism
256	Treaty with Antiochus.
255	Mahindo ordained
251	Earliest date of rock edicts
249	Second date of rock edicts
248	Arsakes rebels in Larihia
	Diodotus rebels in Bactria
246	
244	Third Buddhist Council under Mogaliputia
243	Mahindo goes to Ccylon
242	Barabar cave inscriptions
234	Pillar edicts issued
231	Queen Asandhimitta dies
228	Second Queen married
226	Her attempt to destroy the Bodhi tree
225	Asoka becomes an ascetic
	Issues Rupnath and Sasseram edicts.
224	Dies.
223	
215	Dasaratha's cave inscriptions, Nagarjuni
	AND ADDRESS OF THE PARTY OF THE

In a number of edicts, before and after the synod, he published (2) His throughout India the cardinal principles of the faith Such edicts edicts are still found graven deep upon pillars, caves, and rocks, from the Yusafzaı valley beyond Pesháwar on the north-western frontier, through the heart of Hindustán and the Central Provinces, to Káthiáwar in the west, and Orissa in the east coast of India Tradition states that Asoka set up 84,000 memorial columns or topes The Chinese pilgrims came upon them in the inner Himálayas Forty-two inscriptions still surviving show how widely these royal sermons were spread over India itself 1

In the year of the Council, Asoka founded a State Depart- (3) His ment to watch over the purity, and to direct the spread, of the Depart ment of faith A Minister of Justice and Religion (Dharma Mahámátra) Public directed its operations, and, as one of its first duties was to Worship proselytize, this Minister was charged with the welfare of the aborigines among whom his missionaries were sent did not think it enough to convert the inferior races, without looking after their material interests Wells were to be dug,

and trees planted, along the roads, a system of medical aid was

<sup>1</sup> Major General Cunningham, Director General of the Archeological Survey of India, enumerates 14 rock inscriptions, 17 cave inscriptions, and 11 in-cribed pillars The rock inscriptions are at-(1) Shahbazgarhi in the Yusafzai country, 40 miles east north east of Peshawar, (2) Khalsi on the west bank of the Jumna, (3) Girnar in Kathiawar, 40 miles north of Somnath, (4 to 7) Dhauli in Cuttack, midway between Cuttack and Puri, and Jaugada in Ganjam District, 18 miles north north west of Burhampur,—two inscriptions at each, virtually identical, (8) Sasseram, at the north east end of the Kaimur range, 70 miles south east of Benares (9) Rupnath, a famous place of pagramage, 35 miles north of Jabalpur, (10 and 11) Bairat, 41 miles north of Jaipur, (12) the Khandgiri Hill, near Dhauli in Cuttack, (13) Deotek, 50 miles south east of Nagpur, (14) Mansera, north west of Rawal Pindi, inscribed in the Bactrian character The cave inscriptions, 17 in number, are found at-(1, 2, 3) Barabar, and (4, 5, 6) Nágarjuni Hills, both places 15 miles north of Gaya (7 to 15) Khandgin Hill in Cuttack, and (16 and 17) Ramgarh in Sirguja eleven inscribed pillars are—(1) the Delhi Siwalik, at Delhi, (2) the Delhi Meerut, at Delhi, (3) the Allahabad, (4) the Lauriya-Araraj, at Lauriya, 77 miles north of Patna, (5) the Lauriya Navandgarh, at another Lauriya, 15 miles north north west of Bettia, (6 and 7) two additional edicts on the Delhi Siwalik, not found on any other pillar, (S and 9) two short additional edicts on the Allahabad pillar, peculiar to itself, (10) a short mutilated record on a fragment of a pillar at Sanchi, near Bhilsa, (11) at Rampura in the Tarai, north east of the second Lauriya, near Bettia. The last named pillar and the rock inscription at Mansera (No 14) are recent discoveries since the first edition of this work was published Mansera rock inscription is interesting as being the second in the Bactrian character, and for its recording twelve Edicts complete

established throughout his kingdom and the conquered Provinces, as far as Ceylon, for man and beast.<sup>1</sup> Officers were appointed to watch over domestic life and public morality,<sup>2</sup> and to promote instruction among the women as well as the youth.

(4) Missionary efforts.

Asoka recognised proselytism by peaceful means as a State The Rock Inscriptions record how he sent forth missionaries 'to the utmost limits of the barbarian countries,' to 'intermingle among all unbelievers,' for the spread of religion They shall mix equally with soldiers, Brahmans, and beggars, with the dreaded and the despised, both within the kingdom 'and in foreign countries, teaching better things' 3 Conversion is to be effected by persuasion, not by the sword. Buddhism was at once the most intensely missionary religion in the world, and the most tolerant This character of a proselytizing faith, which wins its victories by peaceful means, so strongly impressed upon it by Asoka, has remained a prominent feature of Buddhism to the present day Asoka, however, not only took measures to spread the religion, he also endeavoured to secure its orthodoxy He collected the body of doctrine into an authoritative version, in the Magadhi language or dialect of his central kingdom in Behar, a version which for two thousand years has formed the canon (pitakas) of the Southern Buddhists In this way, the Magadhi dialect became the Pali or sacred language of the Ceylonese

(5) Re formed canon of Buddhist scriptures

Educts of

Mr Robert Cust thus summarizes Asoka's Fourteen Edicts —

Asoka.

1 Prohibition of the slaughter of animals for food or sacrifice

2 Provision of a system of medical aid for men and animals, and of plantations and wells on the roadside

3 Order for a quinquennial humiliation and re publication of the great moral precepts of the Buddhist faith

4. Comparison of the former state of things, and the happy existing state under the king

5 Appointment of missionaries to go into various countries, which are enumerated, to convert the people and foreigners

6 Appointment of informers (or inspectors) and guardians of morality

7 Expression of a desire that there may be uniformity of religion and equality of rank

8 Contrast of the carnal pleasures of previous rulers with the pious enjoyments of the present king

9 Inculcation of the true happiness to be found in virtue, through which alone the blessings of heaven can be propitiated

- 1 Rock Inscriptions, Edict ii , General Cunningham's Corpus Inscriptionum, p 118
- Rock Inscriptions, Edict vi etc., Corpus Inscriptionum, p. 120. These Inspectors of Morals are supposed to correspond to the Sixth Caste of Megasthenes, the Expression of Arrian.
  - E Rock Inscriptions, Edict v etc., Corpus Inscriptionum, p 120.

### BUDDHIST COUNCIL UNDER KANISHKA 147

- to Contrast of the vain and transitory glory of this world with the reward for which the king strives and looks beyond
- II Inculcation of the doctrine that the imparting of dharma or teaching of virtue to others is the greatest of charitable Wills
- 12 Address to all unbelievers
- 13 (Imperfect), the meaning conjectural
- 14. Summing up of the whole

The fourth and last of the great Buddhist Councils was held Fourth under King Kanishka, according to one tradition four centuries Council, Kanishka after Buddha's death The date of Kanishka is still uncertain, (40 A D ) but, from the evidence of coins and inscriptions, his reign has been fixed in the 1st century after Christ, or, say, 40 A.D.1 Kanishka, the most famous of the Saka conquerors, ruled over North-Western India, and the adjoining countries authority had its nucleus in Kashmír, but it extended to both sides of the Himalayas, from Yarkand and Khokand to Agra and Sind

Kanishka's Council of five hundred drew up three commentanes on the Buddhist faith These commentanes supplied in part materials for the Tibetan or Northern Canon, 'Greater completed at subsequent periods The Northern Canon, or, Vehicle' as the Chinese proudly call it, the 'Greater Vehicle of the Law,' includes many later corruptions or developments of the Buddhism which was originally embodied by Asoka in the 'Lesser Vehicle,' or Canon of the Southern Buddhists (244 BC) 'Lesser The Buddhist Canon of China, a branch of the 'Greater Vehicle,' \ehicle ' was gradually arranged between 67 and 1285 AD It includes 1440 distinct works, comprising 5586 books The ultimate divergence between the Canons is great. They differ not only, as we have seen, in regard to the legend of Buddha's life, but also as to his teaching. With respect to doctrine, one example will suffice According to the Northern or 'Greater Vehicle,' Buddhist monks who transgress wilfully after ordination may yet recover themselves, while to such castaways the Southern or 'Lesser Vehicle' allowed no room for repentance 2

The original of the Northern Canon was written in the Northern Sanskrit language, perhaps because the Kashmir and northern and Southern priests, who formed Kanishka's Council, belonged to isolated Canons Himalayan settlements which had been little influenced by the

<sup>1</sup> The latest efforts to fix the date of Kanishka are little more than records of conflicting authorities See Dr James Fergusson's paper in the Journal of the Royal Assatse Society, Article 1x., April 1880, and Mr E Thomas' comprehensive disquisition on the Sah and Gupta coms, pp 18-79 of the Report of the Archaelogical Survey of Western India for 1874-75, 4to, London, 1876 \* Beal, C 'ena, p 253

growth of the Indian vernacular dialects In one of these dualects, the Mágadhí of Behar, the Southern Canon had been compiled by Asoka and expanded by commentators the Buddhist compilations appear to have given the first literary impulse to the Prakrits or spoken Arvan dialects in India, as represented by the Pali or Mágadhi of the Cevlonese Buddhist scriptures, and the Mahárashtri of the ancient sacred books of The northern priests, who compiled Kanishka's Canon, preferred the 'perfected' Sanskrit which had become by that time the accepted literary vehicle of the learned throughout India, to the Prakrit or 'natural' dialects of the Gangetic valley Kanishka and his kashmir Council (40 A D 3) became to the Northern or Tibeto Chinese Buddhists, what Asoka and his Patna Council (244 BC) had been to the Buddhists of Ceylon and the South

Buddhism as a national religion,

Buddhism was thus organized as a State religion by the Councils of Asoka and Kanishka. It started from Brahmanical doctrines, but from those doctrines, not as taught in hermitages to clusters of Brahman disciples, but as vitalized by a preacher of rare power in the cajital cities of India. Buddha did not abolish caste. On the contrary, revenue to Brahmans and to the spiritual guide ranked among the four great sets of states, with obedience to parents, control over self and acts of kindness to all men and animals. He introduced however a new classification of mankind, on the spiritual basis of believers and unbelievers.

religious

The former took rank in the Buddhist community,—at first according to the rage and merit, in later times, as laity 1 and c'erge 2 (i.e. the religious orders). Buddhism carried transmigration to its utmost spiritual use, and proclaimed our own actions to be the sole ruling influence on our past, present, and future states. It was thus led into the denial of any external being or god who could interfere with the immutable law of cause and effect as applied to the soul. But, on the other hand, it linked together mankind as parts of one universal whole, and denounced the isolated self-seeking of the human heart as 'the heresy of individuality." Its mission was to make men more moral, kinder to others, and happier themselves, not to propitiate imaginary deities. It accordingly founded its teaching on man's duty to his neighbour, instead of on his obligations to God, and constructed its

<sup>\*</sup> l fasóka

<sup>2</sup> Sramana, thikshu tmonk or religious mendicant), bhikit und (nun)

<sup>3</sup> Salásadithi

ritual on the basis of relic-worship or the commemoration of and good men, instead of on sacrifice Its sacred buildings were practical not temples to the gods, but monasteries (viháras) for the religious orders, with their bells and rosaries, or memorial shrines.1 reared over a tooth or bone of the founder of the faith

The missionary impulse given by Asoka quickly bore fruit Spread of In the year after his great Council at Patna (244 BC), his son Buddhism Mahindo<sup>2</sup> carried Asoka's version of the Buddhist scriptures in the Mágadhi language to Ceylon He took with him a In the band of fellow-missionaries, and soon afterwards, his sister, South, the princess Sanghamitta, who had entered the Order, followed etc, 244 with a company of nuns It was not, however, till six hundred E C to years later (410-432 AD) that the Ceylonese Canon was 638 AD written out in Pali, the sacred Magadhi language of the Southern Buddhists About the same time, missionaries from Ceylon finally established the faith in Burma (450 A.D.) The Burmese themselves assert that two Buddhist preachers landed in Pegu as early as 207 BC Indeed, some Burmese date the arrival of Buddhist missionaries just after the Patna Council, 244 BC, and point out the ruined city of Tha tun, between the Sitaung (Tsit-taung) and Salwin estuaries, as the scene of their pious labours Siam was converted to Buddhism in 638 A.D. Java received its missionaries direct from India between the 5th and the 7th centuries, and spread the faith to Bali and Sumatra 3

While Southern Buddhism was thus wafted across the In the ocean, another stream of missionaries had found their way orth, China, etc. by Central Asia into China. Their first arrival in the Chinese andcentury empire is said to date from the 2nd century BC, although it BC to was not till 65 AD that Buddhism there became the estab- 5,2 AD lished religion The Greco-Bactrian kingdoms in the Punjab, and beyond it, afforded a taxourable soil for the faith Scythian dynasties who succeeded the Greco-Bactrians accepted Buddhism, and the carliest remains which recent discovery has

1 Stupas, topes, literally 'heaps or tumuli,' . azvas or dhatu gepas, relic preservers, chartyas 2 Sanskrit, Mahendra

<sup>3</sup> All these dates are uncertain. They are founded on the Singalese chronology, but the orthodox in the respective countries place their national conversion at remoter periods. Occasionally however, the dates can be tested from external sources Thus we know from the Chinese traveller I a-IIian, that up to about 414 AD Java was still unconverted Hian says, 'Heretics and Brahmans were numerous there, and the law of Buddha is in nowise entertained. The Burmese chroniclers go back to a time when the duration of human life was ninety millions of years, and when a single dynasty ruled for a period represented by a unit followed by 140 cyphers See The Imperial Gazetteer of India, Article SANDOW IY

unearthed in Afghanistan are Buddhist Kanishka's Council, soon after the commencement of the Christian era, gave the great impetus to the faith beyond the Himilayas. Tibet South Central Asia, and China, lay along the regular missionary routes of Northern Buddhism, the Kirghiz are said to have carried the religion as far west as the Caspian, on the east, Buddhism was introduced into the Corea in 372A D, and thence into Japan in 552

Buddhist influence on Christiani s

Buddhist doctrines are believed to have deeply affected religious thought in Alexandria and Palestine The question is yet undecided as to how far the Buddhist ideal of the holy life, with its monks, nuns, relic worship, bells, and rosaries, influenced Christian monachism and to what extent Buddhist philosophy aided the development of the Gnostic heresies, particularly those of Basilides and Manes, which rent the early It is certain that the analogies are striking, and have been pointed out alike by Jesuit missionaries in 1six and by oriental scholars in Europe 1 The form of abjuration for those who renounced the Gnostic doctrines of Manes expressly mentions Bodoa and the Skubiavos (Buddha and the Skythian or Sakva)-seemingly, says Weber, a separation of Buddha the Sakya into two At this moment, the Chinese in San Francisco assist their devotions by pictures of the Buddhist Goodess of Mercy, imported on thin paper from Canton, which the Irish Romar Catholics identify as the Viigin Mary with the Infant in her arms, an aureole round her head, an adoring figure at her tect, and the Spirit hovering in the form of a bird -

But it is right to point out that the early Nestorian Christians in China may have been the source of some of these resemblances. The litting of the Goddess of Mercy, Kwanyin, in which the analogies to the Eastern Christian office are most strongly marked, have been triced with certainty only as far back as 1412 AD in the Chinese Cinon. Professor Max

<sup>&</sup>lt;sup>1</sup> For the latter aspect of the question see Weber, founding on I assen, Renan, and Beal, Hi t. Ind. Int., p. 309, note 363, t.1. 1878.

with equal injustice accused Buddhism and Chris ian and Chinese, have with equal injustice accused Buddhism and Chris ianity of consciously plagiarizing each other's rites. Thus Kuang Hsien, the distinguished member of the Astronomical Board, who brought about the Chinese persecution of the Christians from 1665 to 1671, writes of them. They piller this talk about heaven and hell from the refuse of Buddhism, and then turn roun i and revie Buddhism. The Death Word to the Corrupt Doctrines by I fen chu is a Christianity), p. 46 (Shanghai, 1870). See also the remarks of Jao-chow—' The man most distressed in heart'—in the same collection.

For an excellent account from the Chinese texts of the worship and liturgy of Kwan yin, 'the Saviour,' or in her femals form as the Goddess of Mercy, see Beal's Catena of Burthist Scriptures, 383-397 (Trübner, 1871)

Muller endeavoured to show that Buddha himself is the original of Saint Josaphat, who has a day assigned to him by both the Greek and Roman churches 1

Professor Muller's Essay has led to an examination of the Buddha as whole evidence bearing on this subject 3 The results may be a Christian Saint thus summarized The Roman Martyrology at the end of the saints for the 27th November, states 'Apud Indos Persis finitimos sanctorum Barlaam et Josaphat (commemoratio), quorum actus mirandos Joannes Damascenus conscripsit' Among the Indians who border on Persia, Saints Barlaam and Josaphat, whose wonderful works have been written of by St John of Damascus The story of these two saints is that of a young Legend of Indian prince, Josaphat, who is converted by a hermit, Barlaam Saints Barlaam and Josaphat undergoes the same awakening as Buddha from the Josaphat pleasures of this world His royal father had taken similar precautions to prevent the youth from becoming acquainted with the sorrows of life But Josaphat, like Buddha, is struck by successive spectacles of disease, old age, and death, and abandons his princely state for that of a Christian devotee He converts to the faith his father, his subjects and even the magician employed to seduce him. For this magician Theudas, the Buddhist schi-matic Devadatta is supposed to have supplied the orginal, while the name of Josaphat is itself identified by philologers with that of Boddhisattwa, the complete appellation of Buddha.4

This curious transfer of the religious teacher of Asia to the Early Christian Martyrology has an equally curious history John of Damascus wrote in the 8th century in Greek, and an Arabic translation of his work, belonging to the 11th century, still survives The story of Josaphat was popular in the Greek Church, and was embodied by Simeon the Meta phrast in the lives of the saints, are 1150 in The Greek form of the name is 'Iwavad' By the 12th century, the

Saint stages of

<sup>1</sup> Chips from a German Workshop, vol in 10 177-189, ed 1875

<sup>2</sup> Contemporary Review, July 1870

<sup>3</sup> For a list of the authorities, and an investigation of them from the Roman Catholic side, by Emmanuel Cosquin, see Ret in dis Quistions Historiques, lvi pp 579-600, Paris, October 1880

<sup>1</sup> The earlier form of Josaphat was Ioasaph in Greek and Youasaf or Youdass in Arabic, an evident derivation from the Sanskrit Boddhi sattwa, through the Persian form Boudasp (Weber) The name of the magician Theudas is in like manner an accurate philological reproduction of Devadatta or Thevdat

<sup>5</sup> See the valuable note in Colonel Yule's Minio Po's, vol in pp 302-309 (2nd ed 1875) 1

Lase of Barlaam and Josaphat had already reached Western Europe in a Latin form. During the first half of the 13th century, Vincent de Beauvais inserted it in his Speculum Historiale, and in the latter half of that century it found a place in the Golden Legend of Jacques de Vorigine. Meanwhile, it had also been popularized by the troubadour, Guy de Cambrai. From this double source, the Golden I egend of the Church and the French poem of the people, the story of Barlaam and Josaphat spread throughout Europe. German, Provençal, Italian, Polish, Spanish, English, and Norse versions carried it from the southern extremity of the Continent to Sweden and Iceland.

In 1583, the legend was entered in the Roman Martyrology for the 27th day of November, as we have already seen, upon the alleged testimony of St. John of Damascus. A church in Palermo still (1874) bears the dedication, Diro Iosaphat <sup>1</sup>. The Roman Martyrology of Gregory xiii, revised under the auspices of Urban viii. has a universal acceptance throughout Catholic Christendom, although from the statements of Pope Benedict xiv, and others, it would appear that it is to be used for edification, rather than as a work resting on infallible authority. However this may be, the text of the two legends, and the names of their prominent actors, I lace beyond doubt the identity of the Eastern and the Western story.

A lapanese temple, its analo gies to Hinduism and Chris tianity

It is difficult to enter a Japanese Euddhist temple without being struck by analogies to the Christian ritual on the one hand, and to Hinduism on the other. The chainings of the priests, their bowing as they pass the altar, their vestments, rosaries, bells, incense, and the responses of the worshippers, remind one of the Christian ritual. The temple at Rokugo' writes a recent traveller to a remote towr in Japan, 'was very beautiful, and, except that its ornaments were superior in solidity and good taste, differed little from a Romish church. The low altar, on which were likes and lighted candles, was draped in blue and silver, and on the high altar, driped in crimson and cloth of gold, there was nothing but a closed shrine, an incense burner, and a vase of lotuses. In a Luddhist temple at Ningpo, the Chinese goddess of increy,

<sup>1</sup> Yu'c, of cet p 308

<sup>&</sup>lt;sup>2</sup> This aspect of the question is discussed at considerable length by I immanuel Cosquin, pp. 583-594. He gives the two legends of Buddha and of Barlaam Josaphai in parallel columns, pp. 590-594 of the Accide de Cuestions Historiques, vol. lvi., already cited.

Mis Bird's Unbeaten Iracks in Japan, vol 1 p 295 (ed 1880)

Kwan-yin, whose resemblance to the Virgin Mary and Child Serpent has already been mentioned (p 150), is seen standing on a ornamentation serpent, bruising his head with her heel

I he Hindus, while denouncing Buddha as a heretic, have Buddha as been constrained to admit him to a place in their mythology an avatar They regard him as the ninth, and hitherto last, incarnation of Vishnu,—the Lying Spirit let loose to deceive men until the tenth or final descent of Vishnu, on the white horse, with a flaming sword like a comet in his hand, for the destruction of the wicked and the renovation of the world

While on the one hand a vast growth of legends has arisen Buddha's around Buddha, tending to bring out every episode of his life personality into strong relief, efforts have been made on the other hand to explain away his personal identity. No date can be assigned with certainty for his existence on this earth. The Northern Buddhists have fourteen different accounts, ranging from 2422 H s date to 546 BC 1 The Southern Buddhists agree in starting from the 1st of June 543 BC as the day of Buddha's death latter date, 543 BC, is usually accepted by European writers, but Indian chronology as worked back from inscriptions and coins,2 gives the date are 480 Some scholars, indeed, have argued that Buddhism is merely a religious development of the Brahmanical Sankhya philosophy of Kapila (ante, p. 99), that Buddha's birth is placed at a purely allegorical site Kapilavastu, 'the abode of Kupla' that his mother is called Mávadevi, in reference to the Maya doctrine of Kapila's system, and that his own two names are symbolical ones, Siddartha, 'he who has fulfilled his end,' and Buddha, 'the enlightened'

Buddhism and Brahmanism are unquestionably united Links with by intermediate links. Certain of the sacred texts of the Brah Brahmans, particularly the Vrihad Aranyaka and the Atharva I panishad of the Yoga system teach doctrines which are essentially Buddhistic According to Wilson and others Buddha had possibly no personal existence, 3 Buddhism

<sup>1</sup> Come de Koros, on the a thorsty of Tibe an Mes, Tite'an Gram mar, p 199 A debt long overdue has at length been 1 11 to one of the most single minded of oriental scholars by the publication of Dr. Theodore Duka's Life and Horks of Alex nier Comia Arm (Trubner 1885)

<sup>2</sup> General Cunningham works back the date of buddha's death to 478 BC, and takes this as his starting point in the Corpus Inscript of um Indicarum, p vn The subject is admirably discussed by Mr Rhys Davids in the International Aumismata Orientalia (Ceston fasciculus), pp 38-56 He arrives at 412 Bc as the most probable date Oldenberg fixes it at about 450 b c

<sup>2</sup> Professor II II Wilson went so far as to say, It seems not impossible

Sankhya system?

Buddhism was merely the Sánkhya philosophy widened into a national merely the religion, and the religious life of the Buddhistic orders was the old Bráhmanical type popularized 1 The theory is at any rate so far true, that Buddhism was not a sudden invention of any single mind, but a development on a broader basis of a philosophy and religion which preceded it Such speculations, however, leave out of sight the two great traditional features of Buddhism-namely, the preacher's appeal to the people, and the undying influence of his benutiful life. Senart's still more sceptical theory of Buddha as a Solar Myth, has completely broken down under the critical examination of Oldenber

buddl sm did not pust Brat mams n

Buddhista never ousted Brahmanism from any large part of The two systems coexisted as popular reagions from the death of Buddha during thirteen hundred years (543 B.c. to about 800 A D ), and modern Hinduism is the joint product The legends of Buddha, especially those of the Northern Canon, bear witness to the active influence of Brah manism curing the whole period of Buddha's life death certain kings and certain eras were intensely Buddhistic, but the continuous existence of Brahmanism is abundantly proved from the time of Alexander (327 Pc) downwards. The historians who chronicled Alexander's march, and the Greek ambassador Megasthenes who succeeded them (300 LC) in their literary labours, bear witness to the predominance of Brahmanism in the period immediately preceding Asoka scriptions, local legends, Sanskrit literature, and the drama, disclose the survival of Brihman influence during the next six centuries (244 PC to 400 AD) From 400 VD we have the evidence of the Chinese pilgrims, who toiled through Central Asia into India to visit the birthplace of their futh 3

'Never did more devoted pilgrims,' writes the greatest living

that Sakya Musi san anreal being, and that all that is related of him is as much a fiction as is that of his preceding migra ions and the miracles that attended his birth, his life, and his departure. The arguments are dealt with by Weber, Hist Ind Ist., pp 284 290, ed 1678

Dr Oldenberg's Buddha, Sein I elen, contains valuable evidence on this subject (Hoey's transl pp 46, 48 to 59, etc.) See also The Sankhya Aphorums of Kapila, Sanskrit and English, with illustrative texts from the Commentaries by Dr. Ballantyne, formerly I mempal of the Benares College, 3rd ed (Trübner, 1885)

2 See the Life of the Buddha and the Farly History of his Order, derived from the T betan texts, by Mr Woodville Kockhill of the L 5 Legation in China, also Oldenberg's Buddha

3 The Siguli, or Buddhist Records of the Western World, translated from the Chinese, by Samuel Beal (Trubner, 2 vols 1854), has completed student of their lives. 1 'leave their native country to encounter Buddhism the perils of travel in foreign and distant lands, never did and Brah manism, disciples more ardently desire to gaze on the sacred vestiges 400 A D to of their religion, never did men endure greater sufferings by 645 A D desert, mountain, and sea, than these simple-minded, earnest Buddhist priests' Fa-Hian entered India from Afghánistán, Fa Hian, and journeyed down the whole Gangetic valley to the Bay of 399 A D Bengal in 399-413 AD He found Brahman priests equally honoured with Buddhist monks, and temples to the Indian gods side by side with the religious houses of the Buddhist faith

Hiuen Tsiang, a still greater pilgrim, also travelled to India Hiuen from China by the Central Asia route, and has left a fuller 1siang, 629 A.D record of the state of the two religions in the 7th century His wanderings extended from 629 to 645 A.D. Everywhere throughout India he found the two systems eagerly compcting for the suffrages of the people By this time, indeed, Brahmanism was beginning to reassert itself at the expense of the Buddhist religion The monuments of the great Buddhist monarchs, Asoka and Kanishka, confronted him from the moment he neared the Punjib frontier but so also did the temples of Siva and his 'dread' queen Bhima Throughout North-Western India he found Buddhist convents and monks

The political power was also divided, though Buddhist sovereigns still predominated. A Buddhist monarch ruled over ten kingdoms in Afghanistán. At Peshawar, the great monastery built by Kanishka was deserted, but the populace remained faithful In Kashmir, the king and people were devout Buddhists, under the teaching of 500 monasteries and

surrounded by 'swarms of heretics,' 10 Brahmanical sects

and perfected the work begun by Julien and Remusat. Mr Beal's new volumes throw a flood of light on the social, religious, and political condition of India from the 5th to 7th centuries A D. The older authorities are Foe Koue Ki ou Relation des Acraumes Boundhiques Ioriges d'ins la Iartaru, l'Afgnanistan et l'Inde a la fin du v. suile, fin Cin Fa Hian, translated by A Remusat, reviewed by Klaproth and Landresse, 1836 Mr Beal's Fra els of the Budd est Felgrem La Hean translated with Notes and Prolegomena, 1869 Julien's Loyages des Pelerins Boud thistes, t 1, Historie de la Vie de Ilsouen Thiang et de ses Vorages dans l'Inde, tranlated from the Chinese, 1853, t ii and iii , Minnares sur les Contrees Occidentales, par Hunen Insang, translated from the Chinese, 1857-59 C J Neumann's Pilgerfahrten Buddhistischer Priester von China nach Indien, aus dem Chinesischen übersetet, 1583, of which only one volume is published, General Cunningham's Ancient Geography of India, and his Reports of the Archaelogical Survey of India (various dates)

<sup>&</sup>lt;sup>1</sup> St yu ki, Mr Beal's Introduction, pp ix, x

5000 monks In the country identified with Jaipur, on the other hand, the inhabitants were devoted to heresy and war

Buddhism in India, 629-645 A D

Buddhist influence in Northern India seems, during the 7th century AD, to have centred in the fertile plain between the Jumna and the Ganges, and in Behar At Kanauj (Kinyakubja), on the Ganges, Hiuen Islang found a powerful Buddhist monarch, Siladitya, whose influence reached from the Punjab to North-Eastern Bengal, and from the Himalwas to the Narbada river Here flourished 100 Buddhist convents and But the king's eldest brother had been lately 10.000 monks slain by a sovereign of Eastern India, a hater of Buddhism, and 200 temples to the Brahman gods reared their heads under the protection of the devout Siladitya himself

Silacity 1, 634 A D

Siladitya appears as an Asoka of the 7th century A.D., and he practised with primitive vigour the two great Buddhist virtues of spreading the faith and charity The former he council of attempted by means of a general Council in 634 AD one tributary sovereigns attended together with the most learned Buddhist monks and Brahmans of their kingdoms But the object of the convocation was no longer the undisputed assertion of the Buildhist religion. It dealt with the two phases of the religious lite of India at that time discussion between the Buddhists and Brahman philosophers of the Sankhva and Vaiseshika schools second a dispute between the Buddhist sects who followed respectively the Northern and the Southern Canons, known as 'the Greater and the Lesser Vehicle of the Law.' The rites of the populace were of as composite a character as the doctrines of their On the first day of the Council, a statue of Buddha was installed with great pomp, on the second, an image of the Sun god, on the third, an idol of Siva

aditya's harity

Siladitya held a solemn distribution of his royal treasures every five years. Hinch I stang describes how on the plain near Allahabad, where the Ganges and the Jumna unite their waters, the kings of the Empire, and a mulutude of people, were feasted for seventy-five days. Siladitia brought forth the stores of his palace, and Lave them away to Brahmans and Buddhists, to monks and heretics, without distinction the end of the festival, he stripped off his jewels and royal raiment, handed them to the by standers, and, like Buddha of old. but on the rags of a beggar. By this ceremony, the monarch commemorated the Great Renunciation of the founder of the At the same time, he discharged the highest Buddhist faith duty inculcated alike by the Buddhist and Brahmanical religions. namely almsgiving The vast monastery of Nalanda 1 formed Monastery a seat of learning which recalls the universities of Mediæval anda Europe Ten thousand monks and novices of the eighteen Buddhist schools here studied theology, philosophy, lan, science, especially medicine, and practised their devotions I hey lived in lettered ease, supported from the royal funds But even this stronghold of Buddhism furnishes a proof that Buddhism was only one of two hostile creeds in India During the brief period with regard to which the Chinese records afford information, it was three times destroyed by the enemies of the faith 2

Hiuen Tsiang travelled from the Punjab to the mouth of the Mingling Ganges, and made journeys into Southern India But everyoff Buddhuser he found the two religions mingled Buddh-Gayá, which Brahmanholds so high a sanctity in the legends of Buddha, had already 15m, 629become a great Brahman centre On the east of Bengal, Assam had not been converted to Buddhism. In the southwest. Orissa was a stronghold of the Buddhist faith But in the seaport of Tamluk, at the mouth of the Hugh, the temples to the Brahman gods were five times more numerous than the monasteries of the faithful On the Madras coast, Buddhism flourished, and indeed, throughout Southern India, the faith seems still to have been in the ascendant, although struggling against Brahman heretics and their gods

During the 8th and 9th centuries AD, Brahmanism be-Victors of came the ruling religion There are legends of persecutions, Biahman ism, 700instigated by Brihman reformers, such as Kumania Bhatta goo a p and Sankara Acharya But the downfall of Buddhism seems to have resulted from natural decay, and from new movements of religious thought, rather than from any general suppression by the sword - Its extinction is contemporaneous with the rise of Hinduism, and belongs to a subsequent chapter

In the 11th century it was cliefly outlying States, like Kashmir and Orissa, that remained faithful. When the Muhammadans come permanently upon the scene, Buddhism as a popular faith has almost disappeared from the interior Provinces Magadha, the cradle of the religion, still continued Buddhist under the Pal Raj is down to the Musalman conquest of Bakhtiy ir Khilii in 1199 AD.

I Identified with the modern Buragaon near Giga. The Great Monastery can be traced by a mass of brick ruins, 1600 feet long by 400 feet deep General Cunningham's Ancient Geography of India, pp 468-470, ed 1871

<sup>2</sup> Real's Catena of Buddhist Scriptures from the Chinese, p 371, ed 1871

<sup>4</sup> M5 materials supplied to the author by General Cummingham, to

Buddhism an exiled religion, 1000 A D

During nearly a thousand years, Buddhism has been a banished religion from its native home. But it has won greater triumphs in its exile than it could have ever achieved in the land of its birth. It has created a literature and a religion for nearly half the human race, and has affected the beliefs of the other half Five hundred millions of men, or forty per cent of the inhabitants of the world still acknowledge, with more or less fidelity, the holy teaching of Buddha. Afghanistan, Nepal, Eastern Turkistan, Tibet, Mongolia, Manchuria, China, Japan the Eastern Archipelago, Siam, Burma, Caylon, and India, at one time marked the magnificent circumference Is foreign of its conquests. Its shrines and monasteries stretched in a conques se continuous line from what are now the confines of the Russian Empire to the ejuntorial islands of the Pacific During twenty-four centuries, Buddhism has encountered and outlived a senes of powerful rivals. At this day it forms, with Christianity and Is'am, one of the three great religions of the world, and the most numerously followed of the three

Bud 'hist SUTVIVE'S in India.

In India its influence has survived its separate existence The Buddhist period not only left a distinct sect, the Jains but it supplied the spiritual basis on which Brihmanism finally developed from the creed of a caste into the religion of the A later chapter will show how important and how people perminent have been Buddhistic influences on Hinduism The Buddhists in British India in 1881 numbered nearly 34 millions, of whom 31 millions were in British Burma, and 166 892 on the Indian continent almost entirely in North-Lastern Bengal and Assam Logether with the Jun sect, the Buddhist subjects of the Crown in British India amount to close on four millions (1881) 1 The revival of Buddhism is always a possibility in India. This year (1885) in excellent Buddhist journal has been started in Bengali at Chittagong

The Jains number about haif a million in British India The Jan Like the Buddhists, they deny the authority of the Veda, except those Archaol gical Reports and kind assistante this volume is deeply indubted.

1 The Buddhists proper were returned in 1881 for British India at 3,418,476, of whom 3,251 584 were in Br 11 Barma, 155,509 in the Licutement Governorship of Pengal, and 6565 in Assam. The Jams proper were returned at 448 897 in British India by the Census of 1881 but except in a few spots, chiefly among the spurs of the Himalayas and in 3- am and South Lastern Bengal, the Indian Luddhists may be generally reckone I as Jams

in so far as it agrees with their own doctrines They disregard sacrifice, practise a strict morality, believe that their past and future states depend upon their own actions rather than on any external deity, and scrupulously reverence the vital principle in man and beast. They differ from the Buddhists chiefly in their ritual and objects of worship. The veneration of good men departed is common to both, but the Jains have expanded and methodized such adoration on lines of their own

The Buddhists admit that many Buddhas have appeared in successive lives upon earth, and attained Nirvána or beatific extinction, but they confine their reverence to a comparatively small number. The Jains divide time into Jain doc successive eras, and assign twenty-four Jinas, or just men made trines perfect, to each 1 They name twenty-four in the past age, twenty-four in the present, and twenty-four in the era to come, and place colossal statues of white or black marble to this great company of saints in their temples. They adore above all the two latest, or twenty third and twenty-fourth Imas of the present era-namely, Parsvanáth 2 and Mahavira

The Jains choose wooded mountains and the most lovely fain retreats of nature for their places of pilgrimage, and cover them temple with exquisitely-carved shrines in white marble or stucco Párasnáth Hill in Bengal, the temple city of Palitona in Káthiawár, and Mount Abú, which rises with its gems of architecture like a jewelled island from the Rajputana plains, form well known scenes of their worship. The Jains are a wealthy community, usually engaged in banking or wholesale commerce, devoid indeed of the old missionary spirit of Buddhism, but closely knit together among themselves Their charity is boundless, and they form the chief supporters of the beast hospitals, which the old Buddhistic tenderness for animals has left in many of the cities of India

Jainism is, in its external aspects, Buddhism equipped with Relation a mythology—a mythology, however, not of gods but of sunts of Jainism to Buddh-But in its essentials, Jainism forms a survival of beliefs ism anterior to Asoka and Kanishka. According to the old view, the Jains are a remnant of the Indian Buddhists who saved themselves from extinction by compromises with Hinduism, and so managed to erect themselves into a recognised caste

<sup>1</sup> Under such titles as Jagata prabhu, 'lord of the world', Kshinakarma, 'freed from ceremonial acts,' Sarvajna, 'all knowing,' Adhiswara, 'supreme lord,' Tirthankara, 'he who has crossed over the world, and Ima, 'he who has conquered the human passions'

<sup>2</sup> Popularly rendered Parasuath

Juns earlier than

According to the later and truer view, they represent in an unbroken succession the Nigantha sect of the Asoka cdicts Buddhists? The Jains themselves claim as their founder, Mahavira, the teacher or contemporary of Buddha and the Niganthas appear as a sect independent of, indeed opposed to, the Buddhists in the Rock Inscriptions of Asoka and in the Southern Canon (ptakas)

Mahavira who bore also the spiritual name of Vardhamana, 'The Increaser,' is the 24th Jina or 'Conqueror of the Passions adored in the present age of Jain chronology Like Buddha, he was of princely birth, and lived and laboured in the same country and at the same time as Buddha to the southern Buddhistic dates, Buddha 'attained rest' 543 BC, and Mahavira in 526 BC. According to the Jain texts, Mahavira was the predecessor and teacher of Buddha

Antiqui v of the Jains

A theory has accordingly been advanced that the Buddhism of Asoka (244 PC) was in reality a later product than the Nigantha or Jain Coctrines 1. The Jains are divided into the Swet. ambaras, 'The White Robed,' and the Digambaras The Naked' The Tibetan texts make it clear that sects closely analogous to the Jains existed in the time of Buckha and that they were antecedent and rival orders to that which Budoha established -Even the Southern Budchist Canon preserves recollections of a struggle between a naked sect like the Jain Digambaras, and the decently robed Buddhises. This Digambara or Nigantia sect (Nirgrantha, 'trose who have cist aside every te') was very distinctly recognised by Asokas edicts and both the Swetambara and Digambara orders of the modern Jains find mention in the early copper plate inscriptions of Mysore, are 5th or 6th century A.D. The Jains in our own day feel strongly on this subject, and the head of the community it Ahmadahad has placed many arguments before the writer of the present work to prove that their faith was anterior to Buddlasia

Until quite recently, however, I uropean schol is did not admit the pretensions of the Jains to pre Buddhistic antiquity

<sup>1</sup> This subject was discussed in Mr Idward Thomas Jainiam or the Larry Faith of Aroka in Mr Khys Davies a tick in The Academy of 13th September 1879, in his Hibbert Lecture p 27, and in the Numes mata Orientalia (Ceylon fasciculus), pp 55 60

Mr Woodville Rockhill's I sfe of the hud was, from the II ah Hgyur and Batan Heyur in varies louis

<sup>\*</sup> See for example the curious story of the devout Huddhist bride from the Burmese sacred books, in Bishop Bigandet's Tife of Gandama, pp. 257-259, vol. 1 ed 1852

H H Wilson questioned their importance at any period earlier than twelve centuries ago 1 Weber regarded 'the Tains as merely one of the oldest sects of Buddhism, and I assen believed that they had branched off from the Buddhists 2 M Barth, after a careful discussion of the evidence, still thought that we must regard the Jains 'as a sect which took its rise in Buddhism's On the other hand, Oldenberg, who brings the latest light from the Páli texts to bear on the question, accepts the identity of the Jain sect with the Niganthas 'into whose midst the younger brotherhood of Buddha entered '4

The learned Jacobi has now investigated this question from Jacobi s the Jain texts themselves. Oldenberg had proved, out of the investiga Buddhist scriptures, that Buddhism was a true product of question Brahman doctrine and discipline Jacobi shows that both 'Buddhism and Jainism must be regarded as religions developed out of Brahmanism not by a sudden reformation, but prepared by a religious movement going on for a long time's And he brings forward evidence for believing that Jainism was the earlier outgrowth, that it was probably founded by Parsvanath, now revered as the 23rd lina, and merely reformed by Mahavira, the contemporary of Buddha? The outfit of the Jain monk, his alms-bowl, Jainism rope, and water vessel, was practically the equipment of the older than previous Brahman ascetic s In doctrine, the Jains accepted the Bráhman pantheistic philosophy of the Atman, or Universal Soul They believed that not only animals and plants, but the elements themselves, earth, fire, water, and wind, were endowed with souls Buddha made a further divergence. He combited the Brahman doctrine of the Universal Soul, and the Jain dogma, of the elements and

<sup>1</sup> Essays and Latures on the Keil, i of the Hindus, by H. H. Wilson Dr Reinhold Kost's edition, p. 329, vol. i. (1862)

<sup>2</sup> Weber's Indische Studien, NI 210, and Lassen's Indiale 41 rt un kunde, 1v 763 et seg

buth R hains of Inda, ed. 1882, p. 151 also Buth's he we 1 Histoire des Keltzions, in 90

<sup>+</sup> Buddha, his Life, his Date ne, his Orner by Prof Hermann Olden burg Hoey's translation (1882), p 67 Sec also his pp 66 and (foot note) 77, and 175

Jama Sutras, Part I, the Acharinga Sutra, and the Kulpa Sutra by Hermann Jacobs, forming vol was of Max Meller's Se et Bulls it tie Last Chrendon Press, 1884

<sup>6</sup> Jacobi, of cit Introduction, xxxii

<sup>\*</sup> I or slight differences, see Jacobi, xxviii

VOL VI

minerals being endowed with souls, finds no place in Buddhist philosophy 1

Date of the Jain Scriptures

Jacobi believes that the Jain texts were composed or collected at the end of the 4th century BC, that the origin of the extant Jain literature cannot be placed earlier than about 300 BC, and that their sacred books were reduced to writing in the 5th century AD? He thinks that the two existing divisions of the Jains the Swetamburas and the Digamburas, separated from each other about two or three hundred years after the death of the Founder but 'that the development of the Jain church has not been at any time violently interrupted. That, in fact we can follow this development from its true beginning through its various stages, and that Jainism is as much independent from other sects, especially from Buddhism, as can be expected from any sect

Jams in independent see

M terr Jamism In its superficial aspects modern James may be described as a religion allied in doctrine to indient Indian Buddhism, but humanized by saint-worship and nurrowen from a national religion to the exclusive requirements of a sect.

Surviva of Lac no smin Into

Ine nobiest survivaes of buddhism in India are to be found I owever not among any peculiar body but in the religion of the people in that principle of the brotherhood of man, with the reassertion of when each new revisit of Hinduism starts, in the asslum which the great Vaisnary sect afforcs to women who have fallen victims to easte rules to the widow and the obteast in that centleness and charry to ali men, which take the place of a poor law in India and give a high significance to the half sacrical up that of the india.

The Prince There is not I have the Alex

#### CHAPTER VI

### THE GREEKS IN INDIA (327 TO 161 BC.)

RELIGION AND PHILOSOPHY have been the great contributions of India to the world We now come to deal with India, not as a centre of influence upon other nations, but as acted on by them

THE EXTERNAL HISTORY OF INDIA commences with the External Greek invasion in 327 PC Some indirect trade between India sources of the history and the Mediterranean seems to have existed from very ancient of India Homer was acquainted with tin,1 and other articles of Indian merchandise, by their Sanskrit names, and a list has been made of Indian products mentioned in the Bible -The ship captains of Solomon and Hiram not only brought Indian apes, percocks, and sandal wood to Palestine, they also brought their Sanskrit names 3. This was about 1000 BC Assyrian monuments show that the rhinoceros and elephant were among the tribute offered to Shalmaneser II (859-823 BC)4 But the first Greek historian who speaks clearly of India is Early Hekataios of Miletos (549-486 i c), the knowledge of Hero-Greek writers. dotos (450 PC) ended at the Indus and Ktesias, the physician 549-401 (401 BC), brought back from his residence in Persia only a BC tew facts about the products of India its dies and fabrics, monkeys and parrots. India to the east of the Indus was first made known to Europe by the historians and men or science who accompanied Alexander the Great in 327 BC Their narratives, although now lost, furnished materials to Strabo, Megas Pliny, and Arrian Soon afterwards, Megasthenes, as Greek thenes 306-298

1 Greek Kassiteros Sanskrit, Kastira hence the Kassiterides, the Tin or Saily Islands Elephas, wory through the Arabian elegal (from Arabic il, the, and Sanskrit isha, domestic elephan ), is also cited

<sup>2</sup> Sir G Birdwood's Handbook to the British In in Section of the Paris Fxhibition of 1878, pp 22-35 For economic intercourse with ancient India, see Del Mar's Instory of Money in An ient Countries, chaps in and \$ (1585)

<sup>\*</sup> Hebrew, Kophim, tukijim, almugim = Sanskrit kapi, akhi, algukam \* Professor Max Duncker's An unt Ilisto 3 of Inda, p 13 (ed 1881)

ambassador resident at a court in the centre of Bengal (306-298 BC), had opportunities for the closest observation. The knowledge of the Greeks concerning India practically dates from his researches, 300 PC.

Alexan der's ex pedition, 327-325 B C

Alexander the Great entered India early in 327 BC, crossed the Indus above Attock, and advanced, without a struggle, over the intervening territory of the Taxiles 2 to the Jehlam (Thelum) (Hydrspes) He found the Puniab divided into petty kingdoms jealous of each other, and many of them inclined to ioin an invader rather than to oppose him. One of these local monarchs, Porus, disputed the passage of the Jehlam with a force which, substituting chariots for guns, about equalled the army of Ranjit Singh, the ruler of the Punjab in the present century<sup>3</sup> Plutarch gives a vivid description of the battle from Alexander's own letters Having drawn up his troops at a bend of the Jehlam, about 14 miles west of the modern field of Chihanwala,4 the Greek general crossed under cover of a tempes uous night. The chariots hurried out by Porus stuck in the muddy margin of the river. In the engagement which followed the elephants of the Indian prince refused to face the

The fragments of the In the of Means hones collected by Dr. Schwanbeck, with the first part of the In the of Arran, the Periphus Maris Erythrei, with Arian access of the vivage of Newkhos, the Indiae of Kiesias, and Proteings chapers relating a India have been exited in fact volumes with prolegomena by Mr. J. W. M. Cindle, M. A. (Trubrer 1877, 1879, 1882, and 1885). They only raily appeared in the Indiae Arian are much in lebted. General Cunningham Amenia Generally and Findae with 18 m. ps., and his Acres of the Arian Constant Stores, North Schweiger, and Ariantee and Ariantee (2 vols 4to 1807) and the scries of major in an unfortunately mad scale, in General I temperate von Sprence. His off Geografics in I lay (6 that have also been freely availed of

The lakkas, a Turan an race the cribe t inheritants of Pawai Pinin District. They gave their name to the town of lakshisha or Taxila, which Alexander feeling of a rich and populous city the largest between the Indus and Hydaspes, identified with the ruins of Dirri Shahan. Take or A arm, on the ford between Lahore and Pindi Inhatiyan, was the causal of the Punjab in 633 vii. When names are traved in capitals, the object is to refer the reader to the fuller information given in the Imperial Greather of Initia.

\*Namely, '30,000 efficient infantry, 4000 horse, 300 chariots, 200 clephants [Professor Cowell]. The Greek, probably exaggerated the numbers of the enemy. Mexanders army numbers I 'about 50,000 including 5000 Indian auxiliaries under Mophis of Taxila '—General Cun ringham, Anc. Geog. of India, p. 172. See his head account of the battle, with an excellent map, pp. 159-177, ed. 1871.

And about 30 miles south west of Johlam town

Greeks, and, wheeling round, trampled his own army under His son fell early in the onset, Porus himself fled wounded, but on tendering his submission, he was confirmed in his kingdom, and became the conqueror's trusted friend Alexander built two memorial cities on the scene of his victory, -Bucephala on the west bank, near the modern JALALPUR, named after his beloved charger, Bucephalus, slain in the battle, and Nikaia, the present Mong, on the east side of the river

Alexander advanced south east through the kingdom of the Alexander younger Porus to Amritsar, and after a sharp bend backward in the Purjab, to the west, to fight the Kathaei at Sangala, he reached the 327-326 Beas (Hyphasis) Here, at a spot not far from the modern B C battle field of Sobráon, he halted his victorious standards 1 He had resolved to march to the Ganges, but his troops were worn out by the heats of the Punjab summer, and their spirits broken by the hurricanes of the south-west monsoon native tribes had already risen in his rear, and the Conqueror of the World was forced to turn back, before he had crossed even the frontier Province of India The Sutles, the eastern Districts of the Punjab, and the mighty Jumna, still lay between him and the Ganges A single defeat might have been fatal to his army, if the battle on the Jehlam had gone against him, not a Greek would probably have reached the Afghan side of the passes Yielding at length to the clamour of his men he led them back to the Jehlam He there embarked 8000 of his troops in boats previously prepared, and floated them down the river, the remainder marched in two divisions along the banks

The country was hostile, and the Greeks held only the Alexander land on which they encamped At Multan, then as now the in Sind capital of the Southern Punjab Alexander had to fight a pitched battle with the Malli, and was severely wounded in taking the His enraged troops put every soul within it to the sword Farther down, near the confluence of the five rivers of the Punjab, he made a long halt, built a town,-Alexandria, the modern Uchh,-and received the submission of the neighbouring States. A Greek garrison and Satrap, whom he here left behind, laid the foundation of a more lasting influence Having constructed a new fleet, suitable for the greater rivers on which he was now to embark, he proceeded southwards through Sind, and followed the course of the Indus until he reached

<sup>1</sup> The change in the course of the Sutley has altered its old position relative to the Beas at this point. The best small map of Alexander's route is No v in General Cunningham's Am Geg of India, p 104, ed 1871

the ocean. In the apex of the delta he founded or refounded a city—Patala—which survives to this day as Haidarábíd, the native capital of Sind 1. At the mouth of the Indus, Alexander beheld for the first time the majestic phenomenon of the tides. One part of his army he shipped off under the command of Nearkhos to coast along the Persian Gult, the other he himself led through Southern Buluchistan and Persia to Susa, where, after terrible losses from want of water and famine on the march, he arrived in 325 BC.

Leaves India, August 325 B C

Results of Greek expedition 327-325 B C

During his two years campaign in the Punjab and Sind Alexander captured no province but he made allunces founded cities, and planted Greek cirrisons. He had truns ferred much territory from the tribes whom he had half subdued to the chiefs and confederations who were devoted to his cause. Every petty court had its Greek fiction, and the detachments which he left behind at various positions from the Afghan frontier to the Bers and from near the base of the Himalayas to the Sind delta were visible pledges of his At Taxia (Deri Shahan) and Nikua (Mone) in the Northern Punjab at Mexandria (UCHH) in the Southern Punjab at Patala (HAIDAKAPAD) in Sind, and at other points along his route he established military settlements of Greeks or their allies 1 body of his troops remained in Bactria the partition of the Empire after Alexander's death in 323 BC, Bactria and India eventually fell to Seleukos Nikator, the founder of the Syrian monarchy

323-512

Chanla traja 3261 C. Meanwhile, a new power had arisen in India. Among the Indian adventurers who throughd Mexander's camp in the Punjab, each with his plot for winning a kingdom or crushing a rival, Chandra Gupta, an exile from the Ganrette valley seems to have played a somewhat ignominious part. He tried to tempt the wearied Greeks on the banks of the Beas with

The stages down the Indus and Alons, the Person coats, with the per graph cal features and incidents of Nearly and Alons of Anna, per 279 and the major of the stages down to the Industry of the major of the Industrial of the Major of the Industrial of Industrial Industr

schemes of conquest in the rich south-eastern Provinces, but having personally offended Alexander, he had to fly the camp (326 BC.) In the confused years which followed, he managed. with the aid of plundering hordes, to found a kingdom on the ruins of the Nanda dynasty in Magadha, or Behar (316 316 BC. BC) 1 He seized their capital, Pataliputra, the modern Patna. established himself firmly in the Gangetic valley, and compelled the Punjab principalities, Greek and native alike, to acknowledge his suzerainty 2 While, therefore, Seleukos Nikator was winning his way to the Syrian monarchy during the eleven years which followed Alexander's death, Chandra Gupta was building up an empire in Northern India. Seleukos reigned in Syria from 312 to 280 BC, Chandra Gupta in the 312 BC (rangetic valley from 316 to 292 BC In 312 BC, the power of both had been consolidated, and the two new sovereignties were soon brought face to face

About that year, Seleukos having recovered Babylon, pro-Seleukos ceeded to re-establish his authority in Bactria and the Punjab in India, In the Punjab, he found Greek influence decayed Alex-BC ander had left a mixed force of Greeks and Indians at Taxila But no sooner had he departed from India, than the Indians rose and slew the Greek governor. The Macedonians next massacred the Indians 1 new governor sent by Alexander, murdered the friendly Punjab prince, Porus and was himself driven out of India by the advance of Chandra Gupta from the Gangetic valley Scleukos, after a war with Chandra Gupta. determined to ally himself with the new power in India rather than to oppose it. In return for 500 elephants, he ceded the Greek settlements in the Punjib and the Kabul valley, gave his daughter to Chandra Capta in marriage and stationed an ambassador Megasthenes, at the Gangetic court (306-298 BC) 306-298 Chandra Cupta became familiar to the Greeks as Sandrokottos. be King of the Prasu and Gangaridae his capital, Patahputra, or Patna was rendered into Palimbothra. On the other hand, the Greeks and kings of Greenin dynastics appear in the rock inscriptions under Indian forms +

1 Corpus Invitationum Indicirum, 1 7 Jacoba's Jana Siras, Alm

<sup>\*</sup> For the dynasty of Chan Ira Gupta, see Auni ni i Oii n' mia (Ceylon fisciculus), pp. 41-50

<sup>&</sup>lt;sup>3</sup> The modern Patna, or Pattana means simply the city. For its identification with Pataliputra by means of Mr. Ravenshaws final discoveries, see General Cunningham's An. G. or In na, p. 452 et ses

<sup>4</sup> The Greeks as Yonas (Yavanas), from the Insert or Ionians In the Inscriptions of Asoka, five Greek princes appear Antiochus (of Syria), Ptolemy (Philadelphos of Lappt), Antigonos (Gonatos of Macedon),

The India of Megas thenes 300 B C

Megasthenes has left a lifelike picture of the Indian people Notwithstanding some striking errors, the observations which he jotted down at Patná, three hundred years before Christ, give as accurate an account of the social organization in the Gangetic valley as any which existed when the Bengal Asiatic Society commenced its labours at the end of the last century (1784). Up to the time of Megasthenes, the Greek idea of India was a very vague one. Their historians spoke of two classes of Indians,—certain mountainous tribes who dwelt in Northern Afghanistan under the Caucasus or Hindu Kush, and a maritime race living on the coast of Baluchistan. Of the India of modern geography lying beyond the Indus, they practically knew nothing. It was this India to the east of the Indus which Megasthenes opened up to the western world.

His seven c'asses of the peo, le

He describes the classification of the people, dividing them, however, into seven castes instead of four,1-namely, philo sophers, husbandmen, shepherds, artisans soldiers, inspectors, and the counsellors of the king. The philosophers were the Brahmans and the prescribed stages of their life are indicated Megaschenes draws a distinction between the Brahmans (Boaxuaies) and the Sarmanai (Sapuarai) from which some scholars infer that the Buddhist Sramanas or monks were a recognised order 300 f C, or fifty years before the Council of Asoka But the Sarmanai might also include Brahmans in the first and third stages of their life as students and forest recluses 2. The inspectors, or sixth class of Megasthenes have been identified with the Buddhist supervisors of morals, after wards referred to in the sixth edict of Asoka. Arrian's name for them, erioxonou is the Greek word which has become our modern Bishop or overseer of souls.

"Fron-" of Mega It enes

It must be borne in mind that Indian society as seen by Megasthenes, was not the artificial structure described in Manu, with its rigid lines and four sharply demarcated castes. It was the actual society of the court, the camp, and the capital, at a time when Buddhist ideals were conflicting with Brahmanical types. Some of the so called errors of Megas

Maças (of Kyrene), Alexander (11 of I pirus) — Weber, Hist Ind Itt, p.) 179, 252 But see also Wilson, Jeurn Am dis See, vol xii (1850), and Cunningham's Corpus Inscript Indic pp. 125, 126

\* Incient India as described by Megastion, and Arrian, being fragments of the Indika, by J. W. M. Grindle, M. A., p. 40 ed. 1877

<sup>2</sup> Brahmacharins and Vanaprasthas (w) ifin, Wicher very properly declines to identify the **Dappara** exclusively with the Lud flust Sramanas III (Int Int) p. 28 ed. 1878

The ipon (Deodorus, Strabo), immeres (Arrian)

thenes have been imputed to him from a want of due appreciation of this fact Others have been proved by modern inquiry to be no errors at all The knowledge of India derived by the Greeks chiefly, although by no means exclusively, from Megasthenes includes details which were scarcely known to Europeans in the last century The Aryan and Abonginal elements of the population, or the White and Dark Indians, the two great harvests of the year in spring and autumn, the salt-mines, the land making silt brought down by the rivers from the Himalayas, the great changes in the river courses, and even a fairly accurate measurement of the Indian peninsula—were among the points known to the Greek writers

From those sources, the present writer has derived pregnant The old hints in regard to the physical configuration of India. The Indian account which Megasthenes gives of the size of the Indus and rivers its lakes, points to the same conclusion as that reached by the most recent observations, in regard to the Indian rivers being originally lines of drainage through great watery regions In their upper courses they gradually scooped out their beds, and thus produced a low-level channel into which the fens and marshes eventually drained. In their lower courses they conducted their great operations of land making from the silt which their currents had brought down from above. In regard to the rivers as in several other matters, the 'exaggerations' of Megasthenes turn out to be nearer the truth than was suspected until the Statistical Survey of 1871

The Brahmans deeply impressed Mexander by their learning Kalanos and austerities One of them, Kalanos by name, was tempted, the brut notwithstanding the reproaches of his brethren, to enter the service of the conqueror But falling sick in Persia Kalanos determined to die like a Brahman, although he had not consist ently lived as one Alexander on hearing of the philosopher's resolve to put an end to his life, vainly tried to dissuade him then loaded him with jewels, and directed that he should be attended with all honours to the last scene Distributing the costly gifts of his imaster as he advanced, wearing a garland of 323 B C flowers, and singing his native Indian hymns, the Brahman mounted a funeral pyre and screnely perished in the flames.

The Greek ambassador observed with admiration the ab-Indian sence of slavery in India, the chastity of the women, and the society courage of the men In valour they excelled all other Asiatics, 300 B c they required no locks to their doors above all, no Indian was ever known to tell a lie Sober and industrious, good farmers, and skilful artisans, they scarcely ever had recourse to a law-

Petty kingdoms.

suit, and lived peaceably under their native chiefs. The kingly government is portrayed almost as described in Manu, with its hereditary castes of councillors and soldiers Megasthenes mentions that India was divided into 118 kingdoms, some of which, such as that of the Prasu under Chandra Gupta, exercised suzerain powers. The village system is well described, each little rural unit seeming to the Greek an independent Megasthenes remarked the exemption of the husbandmen (Vaisvas) from war and public services, and enumerates the dves fibres, fibrics, and products (animal, vegetable, and mineral) of India Husbandry depended on the periodical rains and forecasts of the weather, with a view to 'make adequate provision against a coming deficiency,' formed a special duty of the Brahmans. The philosopher who errs in his predictions observes silence for the rest of his life

In the Greck tietty, 256 I

Before the year 300 BC, two powerful monarchies had thus begun to act upon the Brahmanism of Northern India, from the east and from the west. On the east, in the Gangetic valley, Chandra Gupta (316-292 BC) firmly consolidated the dynasty which during the next century produced Asoka (264-223 1 C), established Buddhism throughout India, and spread its doctrines from Afghanistan to China, and from Central Asia to Cevlon On the west, the heritage of Seleukos (212-280 BC) diffused Greek influences, and sent forth Greco Bactrian expeditions to the Punjab Antiochos Theos (grandson of Seleukos Nikator) and Asoka (grandson of Chandra Gupta), who ruled these probably conterminous monarchies, made a treaty with each other, 256 PC In the next century, Eukratides, King of Bactria, conquered as far as Alexander's royal city of Patala, the modern Haidiralad in the Sind Delta, and sent expeditions into Cutch and Gujarat, 181-161 BC. Menander advanced farthest into North Western India, and his coins are found from Kabul, near which he probably had his capital, as far as Muttri on the Jumna. Buddhist successors of Chandra Guida profoundly modified the religion of Northern India from the east, the empire of Scleukos, with its Bactrian and later offshoots, deeply influenced the science and art of Hindustan from the west

Greek-m In tia 151-101

We have already seen how much Brahman astronomy owed fi tree 1 to the Greeks, and how the builders' art in India received its first impulse from the architectural exigencies of Buddhisin The same double influence, of the Greeks on the west and of the Buddhists on the east of the Brahmanical Middle Land of

Creck in Ir ian art Bengal, can be traced in many details What the Buddhists were to the architecture of Northern India, that the Greeks were to its sculpture Greek faces and profiles constantly occur in ancient Buddhist statuary They enrich almost all the larger museums in India, and examples may be seen at South Kensing-The purest specimens have been found in the Punjab. where the Greeks settled in greatest force In the Lahore collection there was, among other beautiful pieces, an exquisite little figure of an old blind man feeling his way with a staff subdued pathos, its fidelity to nature, and its living movement dramatically held for the moment in sculptured suspense, are Greek, and nothing but Greek It is human misfortune, that has culminated in wandering poverty, age, and blindness —the very curse which Sophocles makes the spurned Teiresias throw back upon the doomed king-

> Blin l, having seen, Poor, having rolled in wealth, he wi h a star I eeling his way to a strange land shall go

As we proceed eastward from the Punjab, the Greek type Greek and begins to fade Purity of outline gives place to lusciousness Hin lu In the female figures, the artists trust more and scarp use more to swelling breasts and towering chignons, and load the neck with constantly accumulating jewels. Nevertheless, the Grecian type of countenance long survived in Indian art is perfectly unlike the course, conventional ideal of beauty in modern Hindu sculptures, and may perhaps be traced as late as the delicate profiles on the so-called Sun Temple at KANARAK, built in the 12th century AD on the Orissa shore

Not only did the Greek impulse become fainter and fainter Greek in Indian sculpture with the lapse of time, but that impulse types die was itself gradually derived from less pure and less vigorous sources. The Greek ideal of beauty may possibly have been brought direct to India by the officers and artists of Alexander the Great But it was from Græco Bactria, not from Greece itself, that the practical masters of Greek sculpture came to the Punjab Indeed it seems probable that the most prolific stream of such artistic inspirations reached India from the Roman I moure, and in Imperial times, rather than through even the indirect Greenn channels represented by the Bactrian kingdom

It must suffice here to indicate the ethnical and dynastic Foreign influences thus brought to bear upon India, without attempt influences on India ing to assign dates to the individual monarchs Γhe chronology of the twelve centuries intervening between the

Græco - Bactrian period and the Muhammadan conquest still depends on a mass of conflicting evidence derived from inscriptions, legendary literature, unwritten traditions, and coins. Four systems of computation exist, based upon the Vikramaditya, Saka, Seleucidan, and Parthian eras

In the midst of the confusion, we see dim masses moving southwards from Central Asia into India Græco-Bactrian kings are traced by coins as far as Muttra on the Jumna Their armics occupied for a time the Punjab, as far south as Gujarat and Sind Sanskrit texts are said to indicate their advance through the Middle Land of the Brahmans (Madhya desha) to Saketa (or AJODHYA) the capital of Oudh, and to Patna in Behir 2 Megasthenes was only the first of a series of Greek ambassadors to Bengal 1 A Grecian princess became the queen of Chandra Gupta at Patna (circ 306 PC) Græco Bactrian pirls or Yavams, were welcome gifts and figure in the Sanskrit drama as the personal attendants of Indian kings. They were probably fair complexioned slaves from the northern regions. It is right to add, however, that the word Yavan has a much wider application than mercly to the Greeks or even to the Bactrians The credentials of the Indian embassi to Augustus in 22-20 BC were written on skins a circumstance which per naps indicates the extent to which Greek usage had overcome Brahmanical prejudices During the century preceding the Christian era, Scythian or Tartar hordes began to supplant the Græco-Bactrian influence in the Punjab

Greek survivals in In 13

linel.

Tie

The term Yavana, or Yona, formerly applied to any non Brahmanical race, and especially to the Greeks, was now extended to the Sake or Scythians. It probably includes many various tribes of invaders from the west. Patient effort will be required before the successive changes in the meaning of Yavana, both before and after the Greek period, are worked

And en notern

<sup>&</sup>lt;sup>1</sup> Report of the Archaelogical Survey of West in India for 1874-75 p. 49 (Mr. F. Thomas' monograph)

E-Goldstucker assigned the Yavana siege of Siketa (Ajoditia), mentioned in the Mahabhashya, to Menander, while the accounts of the Gargi Sarlina in the Yuga Purana speak of a Yavana expedition as far as Patna but, as Weber points out (Hist. Ind. Lit., p. 251, fostnote 276), the questi in arises as to whether these Yavanas were Greeo Beetrians or India Seethians. See, however Keport of Archive and Survey of Western India for 1874, 75, p. 49, and footnote

<sup>&</sup>quot; Weiner, His' Ind Ist, p 25t (ed 1878), enumerate four

out. The word travelled far, and has survived with a strange vitality in out of the way nooks of India. The Orissa chroniclers called the sea-invaders from the Bay of Bengal, Yavanas, and in later times the term was applied to the Musalmáns <sup>1</sup>. At the present day, a vernacular form of the word is said to have supplied the local name for the Arab settlers on the Coromandel coast <sup>2</sup>.

<sup>1</sup> Hunter's Orissa, vol 1 pp 25, 85, and 209 to 232 (ed 1872)

<sup>&</sup>lt;sup>2</sup> Bishop Caldwell gives Yavanas (Yonas) as the equivalent of the Sonigas or Muhammadans of the western coast Comparative Grammar of the Distribution I anguage, 2nd edition, p. 2 (Trubner, 1875)

#### CHAPFER VII

## SCITHIC INROADS INTO INDIA (126 7 I C 10 544 LD)

Migration from Cen tru Isia

10 1

THE foregoing chapters have dealt with two streams of popula tio i which, stirting from Central Asia poured through the north western passes of the Himilayas and spread themselves out upon the plains of Bengal. Those two great series of migrations are represented by the early Vedic tribes, and by the Graco The first of them give the rice type to Bactrian arm es Indian civilisation the second impressed an influence on Indian science and air more important and more permanent than the mere numerical strength of the invaders would seem But the permuent settlement of the early Vedic ir hes, and the shorter vehement impact of the Græco Bietrian invaders, alike represent movements of the Aryan section of the human race Another great family of mankind, the Turanian, had also its home in Central Asia. The earliest migrations of the furnians belong to a period absolutely prehistoric nor has inductive history yet applied its scrutiny to Turanian antiquity

l. 11

with anything I ke the success which it has achieved in regard to the beginn nas of the Arvan peoples

sey hie MARKON India

Let there is evidence to show that way s of Turanian origin in itemen's overtopied the Him it is or pierced through their openings into India from very remote times. The minigrants doubtless represented many different tribes, but in the dim twilight of Indian history they are mingled together in confused masses known as the Scythians I here are indications that a branch of the Scythian hordes, who overran Asia about 6251 c, mide its was to Patala on the Indus, the site selected by Alexander in 325 1 c. as his place of arms in that delt i, and long the capital of and under the name of Haidarabad. One portion of these Pataia Sestmens seems to have moved westwards by the Persian Gulf to Asseria, another section is supposed to have found its way north east into the Gangetic valley, and to have branched on into the Saky is of Kapilavastu, among whom Buddha

was born 1 During the two hundred years before the Christian era, the Scythic movements come a little more clearly into sight, and in the first century after Christ those movements culminate in a great Indian sovereignty About 126 BC, Tue Chi the Tartar tribe of Su are said to have conquered the Greek settlements 126 B C (?) dynasty in Bactria, and the Græco-Bactrian settlements in the Punjab were overthrown by the Tue Chi<sup>2</sup>

I wo centuries later, we touch solid ground in the dynasty kanishka whose chief representative, Kanishka, held the Fourth Bud 40 A D (?) dhist Council, inc 40 AD, and became the royal founder of Northern Buddhism But long anterior to the alleged Tue-Chi settlements in the Punjab, tribes of Scythic origin had found their way into India, and had left traces of non Aryan in the first century AD was not an isolated effort, but the ripened fruit of a series of ethnical movements

Certain scholars believe that even before the time of Euddha. I re Bil there are relics of Scythic origin in the religion of India has been suggested that the Aswamedha, or Great Horse influences Sicrifice, in some of its developments at any rate was based upon Scythic ideas 'It was in effect,' writes Mr Edward Thomas, a martial challenge which consisted in letting the victim who was to crown the imperial triumph at the year's end, go free to winder at will over the face of the earth, its sponsor being bound to follow its hoofs, and to conquer or The Hill se conciliate' the chiefs through whose territories it passed. Such Sacrifice a prototype seems to hun to shadow forth the life of the Central Asian communities of the horseman class, 'among whom a captured steed had so frequently to be traced from cump to camp, and surrendered or fought for at last'. The curious connection between the Horse Sacrifice and the Man Sacrifice of the pre Buddhistic religion of India has often been noticed. That connection has been explained from the Indian point of view, by the substitution theory of a horse for a human victim. But among the cirly shepherd tribes of Tibet, the two sacrifices coexisted as inseparable parts of The Great

<sup>1</sup> Catena of the Build set Seath a street to Canesa, by S Peal, pp 120-130 See also Herodo us 1 103 to 106 Csomi de Keros, Journa' A 5 Ben, 1833 and H H Wison Arimi Ani ua, 1 212, quotea by Weber, list Ind Lit p 285, el 1875

<sup>2</sup> De Caugnes, supported by Prote sor Cowell on the evidence of coin-Appendix to I lphinstone's Protory of under p. 260, ed. 1860.

Acto t of Archicelegical Survey of the term Is had pp 37, 35 (1876) But see in opposition to Mr. Thomas view, M. Senart in the French Tourn 4sta 1911, 1875 p 126

# 176 SCYTHIC INROADS AND NAGA RACES

Oath Each year the Tibetans took The Little Oath to their chiefs, and sacrificed sheep, dogs, and monkeys But every third year they solemnized The Great Oath with offerings of men and horses, oven and asses 1

Buddha. 1

Whatever significance may attach to this rite, it is certain Seythian(?) that with the advent of Buddhism, Scythic influences made Indeed, it has been attempted to themselves felt in India establish a Scythic origin for Buddha himself. One of his earliest appearances in the literature of the Christian Church is as Buddha the Scythian. It is argued that by no mere accident did the Fathers trace the Manichaan doctrine to Scythianus, whose disciple Terebinthus, took the name of Buddha - As already stated, the form of abjuration of the Manichæan herest mentions Bodda and Skubiaros (Buddha and the Scythian or Sakya), seemingly says Weber, a separation of Buddha Sakva-muni into two I he Indian Buddhists of the Southern school would dwell hight vion, or pass over altogether, a non-Aryan origin for the founder of their faith. We have seen how the legend of Buddha in their hands issimilated itself to the old epic type of the Arvan hero. But a Scythic origin would be congenial to the Northern school of Buddhism to the school which was consol dated by the Scythic monarch Karishka, and which supplied a religion during more than ten centuries to Seythic tribes of Central Asia

Mean ra ( Tanta

We find, therefore, without surprise, that the sacred books of Tibet constantly speak of Buddha as the Sakya In them, Buddha is the hear apparent to the throne of the Sakras, his doctrine is accepted by the Sakva race, and a too strict agherence to its tenets of mercy ends in the destruction of the Sakya capital, followed by the slaughter of the Sakya people + If we could be sure that Sakva really signified Scythian, this evidence would be conclusive. But the exact meaning of Sakva. although generally taken to be the Indian representative of Scythian, as the Persian Sakæ was the equivalent of Scythae, has yet to be determined. At one time it seemed as if the

<sup>1</sup> Early History of Tipe, in Mr. Wood ville Rockly Il . I rfe of the Buddha, from the Tibetan Classics, p. 204 (Trubner, 1884)

<sup>&</sup>quot; 'I believe the legend of Sakya was perceived into the history of Sor linnus, Beal's Catena of the Bunahist Sery unes from the Chine is 1 129 / Irubner, 1871:

<sup>4</sup> Weller's History of Indian Infrature, p. 309, footnote 363 (Trubner, 1878 But Buddhism probably reached the Early Church through the Scythians, so that Buddha might be called Skuthianos, as the Scythian religious founder, nathout implying that he was a born Scythian. I ade \* 1 h ante, p 140, 1 I', LUGE IX

Tibetin records might settle the point These hopes have, however, been disappointed, as the earliest Tibetan records prove to be a reflex of foreign influences rather than a depository of indigenous traditions

Tibet, Khoten, and other countries to the north of the Artificial Himalayas, on adopting Buddhism, more or less unconsciously nature of Tibetan re-cast their national traditions into Buddhist moulds 1 These traditions countries formed the meeting place of two distinct streams of civilisation,—the material civilisation of China, and the religious civilisation of India. Some of the early Tibetan legends seem to be clumsy copies of the stories of the first Chinese sovereigns recorded in the Bamboo Books 2 The Tibetan classics further obscure the historical facts, by a tendency to trace the royal lines of Central Asia to the family or early converts of Buddha, as certain mediæval families of Europe claimed descent from the Wise Men of the Inst, and noble gentes of Rome found their ancestors among the heroes of the Trojan war. Thus the first Tibetan monarch derived his line from Prasenadut, King of Kosala the life-long friend of Buddha, and the dynasty of Khoten claimed, as its founder, a son of King Dharm isoka

The truth is, that while I ibet obtailed much of its material Scurces of Tibetan civilisation from China its medicine, its mathematics its ideas and weights and measures, its chronology, its clothing, its mul-trad ions berries tea and ardent spirits at received its religion and letters from India, together with its philosophy, and its ideal of the spiritual life. The mission of the seven libetan nobles to India to find an alphabet for the vet unwritten language of Tibet is an historical event of the 7th century and the Indian monastery of Nalanda was reproduced with adel to in the great Hsamyas, or religious house at Thisa. The struggle between Chinese and Indian influences disclosed itself alike in the public d spurations of the Tibetan sects and in the inner intrigues of the palace. One of the greatest of the Libetan monarchs married two wives, -- in Indian princess who brought Buddhist images from Nepal, and a Chinese princess who brought silk-brocades and whisky from China We must incretore receive with caution the evidence as to the original signification of the word Sakya, derived from the records of a nation which was so largely indebted for its ideas and its traditions to later foreign sources

<sup>1</sup> Parly Historics of Tibet and Khoten, in Mr. Rockhill's Life of the Buddha, p 232, etc

<sup>\*</sup> Idem p 203 VOL VI

## 178 SCITHIC INROADS AND NAGA RACES

Evidence 15 to the Sakias

That evidence should, however, he stated The Tibetan of Tibetan sacred books preserve an account of the Sakya creation, of the non-sexual procession of the ancient Sakya kings, and of the settlement of the Sakyas at Kapila, the birthplace of Buddha Their chief seat was the kingdom of Kosala, near the southern base of the Himalayas Tibetan traditions place the early Indian homes of the Sakvas on the banks of the Bhigirathi, as distinctly as the Vedic hamns place the homes of the primitive Arrans on the tributaries of the Indus They claim, indeed, for Buddha a Kshattrivan descent from the noble Ishkvaku or Solar line But it is clear that the race customs of the Indo-Sakyas differed in some respects from those of the Indo-Aryans

Sikis roce cu-toms

At birth, the Sakva infant was made to bow at the feet of a tribil image Takshi Sakvi vari and which, on the presentation of Budaha aselt bowed down to the divine child! In regard to marriage the old Sakva law is said to have allowed a man only one wife - The dead were disposed of by burid, although cremation was not unknown. In the hAs or funeral mounds of Buddhism is apparently seen a reproduction of the royal Scythian tombs of which Herocott's speaks. Perhaps more remarkable is the resemblance of the great co-decease of Budchas companion to the Scythian holocausts of the followers servants and horses of a dead monarch 4. On the death of Buddha according to the Libetan texts a co decease of 18 000 of 1 - disciples took place. On the each of the faithful Mauc, yavana the co-decease of disciples amounted to 70 000, while on that of Samputra the codecerse of Buddhist ascet is was as high as 80,000. The composite idea of a codecease of followers to either with a funeral mound over the relics of an illustrious personne, was in accordance with observies of the South in type

sall ic far h n Irda, 10 634 10

Whatever may be the value of such analogies, the influence of the Scythian dynasties in Northern India is a historical first. The Northern or Tibetan form of Buddhism, represented by the Scythian monarch Kanishka and the Louith Council in 40 A.D., soon made its way down to the plains of Hindustán, and during the next six centuries competed with the carlier Buddhism of Asoka The Chinese pitgrim in 629-645

<sup>1</sup> Mr Rockfall . I tfe of the Budaha, p 17 2 Id m, p 15

<sup>3</sup> Heron dus is 71, 127

<sup>4</sup> The staughter of the king's concubine, can be rer, and followers is also mentioned in Herodotu, iv 71 and 72

Mr Kocklin's / ije of the buidha, p. 141 feetingte 3, and p. 148

<sup>4</sup> Nume in ita Orunta ia (Ceston fasc., 1 54

AD found both the Northern or Scythic and the Southern forms of Buddhism in full vigour in India. He spent fourteen months at China-pati, the town where Kanishka had kept his Chinese hostages in the Punjab, and he records the debates between the Northern and Southern sects of Buddhists in various places I he town of China-pati, ten miles west of the Beas river, 1 bore witness to later ages of the political connection of Northern India with the Trans-Himalayan races of Central and Eastern Asia The Scythic influence in India was a Scythic dynastic as well as a religious one. The evidence of coins settlements and the names of Indian tribes or reigning families, such as in India. the Sakas, Huns, and Nagas, point to Scythian settlements as far south as the Central Provinces 2

Some scholars believe that the Scythians poured down upon Scythian India in such masses as to supplant the previous population elements in The Jats or Jats, who now number 41 millions and form one-lation fifth of the inhabitants of the Punjab, are identified with the Getae, and their great sub division the Dhe with the Dahae, whom Strabo places on the shores of the Caspian view has received the support of eminent investigators, from Professor H H Wilson to General Cunningham, the late Director (inneral of the Archeological Survey of India 4 The existing division between the lats and the I)he has, indeed been (1) The traced back to the contiguity of the Massa-getae or Great Jats Cretae, and the Dahae, who dwelt side by side in Central Asia, and who may have advanced together during the Scythian movements towards India on the decline of the Greco-Bactrian Empire Without pressing such identifications too closely in the service of particular theories, the weight of authority is in favour of a Scythian origin for the Jats the most numerous and valuable section of the agricultural population of the Punjab A similar descent has been assigned to certain of the Raiput

<sup>1</sup> General Cunningham . In Ge , of India p 200

Muir Sinski t Feets, thep wood a (1868) Sir C Grant's Galette of the Central Premies, Ix, etc. (Nagpur, 1870). Reports of the It Is logical Survey of India and of Western It dia, Professor H. H. Wilson (and Dr & Hall), It had Furing, n 134

<sup>3</sup> The word occurs as Jus and Jus but the identity of the two forms has been established by reference to the fine 4k are. Some are now Hindus, others Muhammadins

<sup>\*</sup> See among other places, part is of his Inchicol gual Reports, p 19

Massa means 'great in Pehlevi

<sup>6</sup> It should be mentioned, however, that Dr Trumpp believed them to be of Aryan origin (Zatoh d Daitsch Mory Gordlich, xx p 690) See Mr J Beames' admirable edition of Sir Henry Elhott's Glessary of the Races of the North Wistern Pro in es, vol 1 pp 130-137, ed 1869

tribes. Colonel Tod, still the standard historian of Rájásthán, strongly insisted on this point

(2) The Kajputs

The relationship between the Jats and the Rajputs, although obscure, is acknowledged and although the jus connubit no longer exists between them, an inscription seems to show that they intermarried in the 5th century AD1 Professor Cowell indeed, regards the arguments for the Scythic descent of the Raputs as inconclusive? But authorities of weight have deduced, alike from local investigation - and from Sanskrit literature in Scythic origin for the Jits and for certain of the Rapput tribes. The question has lately been ciscussed, with the fulness of local knowledge, by Mr. Denzil Indictsor the chief Censes officer for the Pennils in 1881 His conclusions are—Lirst that the terms Raput and Jat indicate a difference in occupation and not in only new Second, that even if they represent district wives of migration, separated by an interval of time, they belong to one and the same Third that whe her I its and Rapputs were ethnic s ock or were not or ginally distinct,' the two now form a common stock the distinct on between I r and Raji ut being social 1 ther than ethnic We shall see that earlier manations of Central Asian bordes also supplied certain of the Niga, cr so called appropriate, races of India

In an man the series

Incorporate scattements were not encoded without a struggle As Chandra (sa, to hid authored nomable Congetic victor, and rolled back the tide of Circo Burran conjects 312-3061 C

so the native princes who stemmed the torrent of Scythian invasion are the Indian heroes of the first century before and after Christ Vikramáditya, King of Ujjain, appears to have won his paramount place in Indian story by driving out the invaders An era, the Samvat, beginning in 57 BC, was Samvat founded in honour of his achievements. Its date 1 seems era 57 at variance with his legendary victories over the Scythian BC Kanishka in the 1st century after Christ 2 But the very title of its founder suffices to commemorate his struggle against the northern hordes, as Vikramáditva Sakári, or Vikramaditva, the Enemy of the Scythians

The name of Vikramáditya, 'A very Sun in Prowess,' was borne, as we have seen, by several Indian monarchs later ages their separate identity was merged in the ancient renown of the Slaver of the Scythians, who thus combined the There was a tendency to fame of many Vakramadityas assign to his period the most eminent Indian works in science and poetry,—works which we know must belong to a date long after the first century of our era His reign forms the Augustan era of Sanskrit literature, and tradition fondly ascribed the highest products of the Indian intellect during many later centuries to the poets and philosophers or Nine Gems, of this Vikramiditya - Court As Chandra Gupta, who freed India from the Greeks, is celebrated in the drama Mudrá rakshasa, so Vikramaditya, the vanduisher of the Scythians, forms the central roval personage of the Hindu stage

Vikrimiditia's achievements however, furnished no final de 5 700 liverance, but merely form an episode in the long struggle between Scothian Another (78) the Indian dynistics and new races from the north popular era, the Sika, literally the Scythian takes its com mencement in 78 AD and is supposed to commemorate the defeat of the Seythians by a king of Southern India Saliyahana 4 During the seven centuries which followed three powerful monarchics, the Senas, Gupt is and Valabhis established themselves

<sup>1</sup> Santal vis, the 'Year' The uncertainty which surrounds even this long accepted finger post in Indian chronology may be seen from Di. I Leigusson's paper 'On the Saka and Samoat and Gupta eras (Junnal Ast As Soc, New Series, vol xii 'especially p 172

<sup>&</sup>quot;The Hushka, Jushka, and Kanishka fama of the Raji Tarangim, or Chronicles of Kashmir are proved by inscriptions to belong to the 4th century of the Scheneidan era, or the 1st century AD

<sup>2</sup> Monday, 14th Murch 78 A to Julium style

<sup>4</sup> General Cunninghim, see also Mr. I du. Thomas' letter dated 16th September 1874 to The Jeaunn, which beings this date within the period of the Komshki fimily (2 i c to \$7 x ii )

dynasty. 60 B C to 235 A D

Gupta dynasty, 319-470 4 D

Sena (Sah) in Northern and Western India. The Senas and Singhas, or Sátraps of Suráshtra, are traced by coins and inscriptions from 60 or 70 B.C to after 235 A D 1 After the Senas come the Guptas of KANAUL<sup>2</sup> in the North-Western Provinces, the Middle Land of ancient Brahmanism. The Guptas introduced an era of their own, commencing in 319 AD, and ruled in person or by viceroys over Northern India during 150 years, as far to the south west as Kathiawar. The Gupta dynasty was overthrown by foreign invaders, apparently a new influx of Huns or Tartars from the north west (450-470 A.D.).

Valabhi dynasty. 480-722 A D

The Valabhis succeeded the Guptas, and ruled over Cutch, north-western Bombay, and Malwa from 480 to after 722 1 D 4 The Chinese pilgrim, Hiuen Tsiang, gives a full account of the court and people of \ alabhi (6,0-640 4 D) Buddhism was the State religion, but heretics, it Brihmans, abounded, and the Buddhists themselves were divided between the northern school of the Scythian dynasties, and the southern or Indian The Valabhis seem to have been overthrown school of Asoka by the early Arab invaders of Sind in the 5th century

Long - ruggle u ainst Sevilic mvacers, 57 B c tc 544 A D

The relations of these three Indian dynasties, the Senas, Guptas, and Valabhis, to the successive hordes of Scythians, who poured down on Northern India, are obscure is abundant evidence of a long-continued struggle, but the efforts to affix dates to its chief episodes have not yet pro duced results which can be accepted as final Iwo Vikramaditya Sakaris, or vanquishers of the Scythians, are required for the purposes of chronology and the great battle of Korur near Multan, in which the Scythian hosts perished has been shifted backwards and forwards from 78 to 544 AD

The truth seems to be that, during the first six centuries of the Christian era the fortunes of the Sev hian or Firther races rose and fell from time to time in Northern India than once sustained great defeats and they more than once overthrew the native dynastics. Their presence is popularly

- 1 By Mr. Newton Sec. Mr. F. Thomas on the Coms of the Sah Kings, Archaol her Weste n India, p 44 (1876), and Dr. 1 Fergusson, Journa 1 oy As Sa, 1880
- Now a town of only 16,646 inhabitants in Farukh had District but with ruins extending over a semicire'e of 4 miles in dismeter
- 2 Lat-desha, including the collectorates of Strit, Broatti, Kaika 211 parts of BARODA territory
- 4 The genealogy is worked out it detail by Mr. 1. Homas, it infra 1, 80-82
- 78 A 1 was the popularly received date, commemorated by the Saka ers, between 524 and 544 A b. is suggested by Dr. Lergusson ip 284 · Journal key As Soc, vol xii jin 1880

attested during the century before Christ by Vikramaditya (57 B C?), during the 1st century after Christ, it is represented by the Kanishka family (2 BC to 87 AD), it was noted by Cosmas Indicopleustes, about 535 AD

A recent writer on the subject 1 believes that it was the white Huns who overthrew the Guptas between 465 and 470 He places the great battles of Korur and Maushari, which 'freed India from the Sakas and Húnas,' between 524 and 544 AD But these dates still lie in the domain of inductive, indeed almost of conjectural, history Cosmas Indicopleustes, who traded in the Red Sea about 535 AD, speaks of the Huns as a powerful nation in Northern India in his days 2

While Greek and Scythic influences had thus been at work in The pre-Northern India during nine centuries (327 BC to 544 AD), Aryan element in another (so called indigenous) element was profoundly affecting ancient the future of the Indian people A previous chapter has traced India the fortunes, and sketched the present condition, of the pre-Aryan 'aborigines' The Brahmanical Aryans never accomplished a complete subjugation of these earlier races. The tribes and castes of non Arvan origin numbered in 1872 about 18 millions in British territory, while the castes who claim a pure Aryan descent are under 16 millions 3. The pre Aryans have influenced the popular dialects of every Province, and in Southern India they still give their speech to 28 millions of people

were merely colonies or confederacies of Arvan tribes, who had pushed in among a non Aryan population. When an Aryan Their family advanced to a new territory it had often, as in the case lasting of the Pandara brethren, to clear the forest and drive out the aboriginal people. This double process constantly repeated itself, and as late as 1657, when the Hindu Raja founded the present city of Barrilly, his first work was to cut down the jungle and expel the old Katheriyas. The ancient Brahmanical kingdoms of the Middle Land (Madh) a desha), in the North-Western Provinces and Oudh, were surrounded by non-Arym All the legendary advances beyond the northern centre

The Vedic settlements along the five rivers of the Punjab

of Aryan civilisation, narrated in the epic poets, were made into 1 Dr. J. Lergusson, Journal Roy. 4. Soc., pp. 252-254, etc. (1880) 2 Topo, raphia Christ ana, lib xi p 338 aru bergusson, ut supra

<sup>3</sup> This latter number included both Britiman- (10, 574 444) and Kshattrijas and Kajputs (5,240 495) Put, as we have just seen, some of the Rajput tribes are believed to be of Soythic origin, while others have been incorporated from confessedly non Aryan tribes (zene ante, p. 91) Such non Arian Rapputs more than outnumber any survivals of the Vaistas of pure Aryan descent

## 184 SCYTHIC INROADS AND NAGA RICES

the territory of non Aryan 1900. When we begin to catch historical glimpses of India, we find the countries even around the northern Aryan centre ruled by non Aryan princes. The Nandas, whom Chandra Gupta succeeded in Behar, appear as a Sudra of non Aryan dynasty, and according to one account, Chandra Gupta and his grandson Asoka came of the same stock.

Pre
Anar
kingdoms
in
Norther
In un

The Buddhist remain did much to incorporate the pre Arvan tribes into the Indian polity. During the long struggle of the India Arvans against Greeo Baction and Soythian inroads (627 i.e. to 5.14 a.d.) the Indian aboriginal rices must have had an increasing importance whether as enemies of allies. At the end of that struggle, we discover them rading in some of the finest tracts of Northe n India. In almost every District throughout O hard to North Western Ironices rained towns and forts are ascrabed to abord a litagenes between the 5th and 11th centuries Ada When the William and in our frest supplies a homer historic if of the fitted for those In the tribes were star in possession of several of these In tricts and had only been literal end from others.

or Scythian era took its commencement (78 A D), is held by The some authorities to have been of Takshak descent In the Takshaks, 7th century A D, Taki, perhaps derived from the same race, 633 A D was the capital of the Punjab The Scythic Takshaks, indeed, are supposed to have been the source of the great Serpent Race, 1881 A D the Takshakas or Nagas, who figure so prominently in Sanskrit literature and art, and whose name is still borne by the Nága tribes of our own day The Takkas remaining to the present time are found only in the Districts of Delhi and Karnal They number 14 305, of whom about three-fourths have adopted the faith of Islam

Inc words Niga and Takshaka in Sanskrit both mean The a 'snike' or tailed monster. As the Takshakas have been Nagas questionably connected with the Scythian Fakkas, so the Nagas have been derived by conjecture in the absence of evidence from the Tartar patriarch Nagas, the second son of Elkhan Both the terms, Nagas and Takshakas, seem to have been loosely applied by the Sanskrit writers to a variety of non Arvan peoples in India, whose religion was of an enti-Arvan type. We learn, for example, how the five Pandava brethren of the Machaberta berned of the stake king Takshaka from his primeral kind days a crest. The Takshaka and Nagas were the tree and serject wers a person whose rites and objects of adoration have appressed tren selves deeply on the architecture and scull times of Irea. They included in a confused in micr, several interent rices of Scythic origin.

The construction to a Tree and Sement Worship in India In a has delicerately selected the term. South an for the anii Arvan Sey his elements, which entered so largely into the Indian religions both in incient and a modern times. The Crinese records give a full account of the Naga geography of ancien. India The Naga kingdoms were both numerous and powert, and Buddlish derived many or its royal converts from them. The

<sup>1</sup> Tol A , we is no seel 187 )

<sup>&</sup>quot;Inki or As rer 45 miles wes of I in the General Commentum of George In In 19 191 and Map VI the 1871. This Tak has however considerably to the south east of the Tak had a fact index server for

<sup>\*</sup>In I requisions free are Seron Ho in 12 71 72 (India Museum 4, 1868). For the results of more recent local research see Mr. Rivett Circus papers in the fevere of tax to Soc, began. The Socks Semi-d in India, Ancient Soulp mings on Rocks. Stone Carvings at Museum continues the Honouribe Research See Stone Carvings at Museum Worship in Western India, and other essays in the honoury As. Soc. Journey, theo, Refer soc. Area, Special Soc.

hecome 'he 1)ragon races of China.

Chinese chroniclers, indeed, classify the Nagá princes of India into two great divisions, as Buddhists and non-Buddhists The serpent-worship, which formed so typical a characteristic of the Indo Scythic races, led the Chinese to confound those tribes with the objects of their adorations, and the fierce Indo-Scythic Nagas would almost seem to be the originals of the Dragon races of Chinese Buddhism and Chinese art compromises to which Buddhism submitted, with a view to winning the support of the Naga peoples, will be referred to in the following chapter, on the Rise of Hinduism

1 hc Chakkars of Rawal Pindi. A D

As the Greek invaders found Rawal Pindi District in possession of a Scythic race of Takkas in 327 BC, so the Musalman conqueror found it inhabited by a fierce non Aryan race of Ghakkars thirteen hundred years later The Ghakkars tor a time imperilled the safety of Mahmud of Ghazni in 1008 Farishta describes them as savages, addicted to polyandry and 1008-1857 infanticide. The tide of Muhammadan conquest rolled on, but the Ghakkars remained in possession of their sub Hima layan tract 1 In 1205 they rayaged the Punjab to the gates of Lahore, in 1206 they stabbed the Muhammadan Sultan in his tent, and in spite of conversion to I-lam by the sword, it was not till 1525 that they made their submission to the Emperor Babar in return for a grant of territory next two centuries they rendered great services to the Mughal dynasty against the Afghan usurpers and rose to high influence Driven from the plains by the Sikhs in 1765 in the Punjab in, the Ghakkar chiefs maintained their independence in the Murree (Marri) Hills till 1830, when they were crushed after a bloody struggle. In 1849, Rawal Pinch passed, with the rest of the Sikh territories, under British rule Ghakkars revolted four years afterwards, and threatened Murree, the summer capital of the Punjab, as lately as 1857 The Ghakkars are now found in the Punjib Districts of Rawil Pindi, Johlam, and Hazara. Their total number was returned at 25,789 in 1881 They are described by their British officers is 'a fine spirited race, gentlemen in ancestry and bearing, and clinging under all reverses to the triditions of noble blood '-

1 yans of Pareuly matic

The population of Rawal Pindi District has been selected to illustrate the long continued presence and vitality of the pre-Aryan element in India Other parts of the country must be

Hor a surmary of their later hit is scarted on Kawai links DI IKIET, In Imperial Guzetteer of Inter

<sup>\*</sup> He Impered Gardier of Incia, red Ranas Pasis District

more briefly dealt with Proceeding inwards into the North-Western Provinces, we everywhere find traces of an early Buddhist civilisation in contact with, or overturned by, rude non Aryan tribes. In Bareilly District, for example, the wild Ahirs from the north, the Bhils from the south, and the Bhars from the east, seem to have expelled highly-developed Aryan communities at some period before 1000 A.D. Still farther to the east, all remains of pre historic masonry in Oudh and the North-Western Provinces are assigned to the ancient Buddhists or to a non-Aryan race of Bhars

The Bhars appear to have possessed the north Gangetic The Bhars plains in the centuries coeval with the fall of Buddhism in Oudh Their kingdoms extended over most of Oudh Lofty mounds covered with ancient groves mark the sites of their forgotten cities, and they are the mysterious 'fort-builders' to whom the peasantry ascribe any ruin of unusual size central valley of the Ganges, their power is said to have been crushed by the Sharki dynasty of Jaunpur in the end In Jaunof the 14th century In the Districts north of the Gan-pur getic plain, the Bhars figure still more prominently in local traditions, and an attempt has been made to trace their continuous history In GORNAHILR DISTRICT, the aboriginal InGorakh I harus and Bhars seem to have overwhelmed the early pur outposts of Arvan civilisation several centuries before Christ Their appearance on the scene is connected with the rise of They became vis-als of the Buddhist kingdom of Behar on the south-east and on the fall of that power, about 550 and, they regained their independence Chinese pilgrim in the 7th century comments in this region on the large number of monasteries and towers—the latter probably a monument of the struggle with the aboriginal Bhars, who were here finally crushed between the 7th and the 10th centuries AD. In 1881, the total Bhar population of Oudh and the North-Western Provinces numbered 349 113

As we advance still further eastwards into Bengal, we find that the non Arvan races have within historical time supplied a large part of the Hindu population. In the north, the Koch The Koch established their dominion upon the ruins of the Arvan of Northein kingdom of Kamrup, which the Afghan King of Bengal had Bengal overthrown in 1489. The Koch gave their name to the Native State of Kech Bittak, and their descendants together in Kuch with those of other non Aryan tribes, form the mass of the Behar people in the neighbouring British Districts, such as RANGPUR In Rang-In 1881, they numbered 14 million in Northern Bengal and Pur

Behar One part of them got 11d of their low origin by becoming Mushlmans, and thus obtained the social equality which Islam grants to all mankind. The rest have merged more or less imperfectly into the Hindu population and about threequarters of a million of them claim, in virtue of their position as an old dominant race, to belong to the Kshattrian caste They call themselves Righansis, a term exactly corresponding to the Rapputs of Western India. The Hinduized Ruas of Kuca Beaar obtained for their ancestors a divine origin from their Briden in genealogists in order to effice their aboriginal descent and among the nobility all mention of the Koch tribe The present Maharaia married the daughter Was acole ed of he celebrated theistic mostle Keshab Chandra Sen, the sender of the Brihmo Sana. He is in honorary major in the British arm, and times a promitation Cilcuity and THE FEET OF THE

Kuch Behai Kujas

As we rise from the Gangetic plains into the highlands of the Central Provinces, we reach the abiding home of the non-Aryan tribes One such race after another-Gaulis, Nágas, Gonds, Ahirs, Bhils—ruled from the Satpura plateau 1 Some of their chiefs and leading families now claim to be Kshattriyas. and a section of one of the lowest races, the Chauhans. borrowed their name from the noble 'Chauhan' Raiputs

In the Lower Provinces of Bengal, we find the delta in Lower peopled by masses of pre Arvan origin. One section of them Bengal has merged into low-class Hindus, another section has sought a more equal second organization by accepting the creed of Munammad But such changes of faith do not after their ethnical type, and the Masalman of the delta differs as widely in race from the Afghan, as the low-caste Hindu of the delta differs from the Brahman - I broughout Southern India, the in non Arvan elements form almost the entire population, and Sou hern Ir i a have supplied the great. Drividin fam ly of languages, which are spoken by 28 mill o 8 of people. Two of our object and most faithful alies in the Mudiis Presidency the enlightened dynasty of Traymore and the ancient princes of P. lakotta, he survivals of the eme when non Arvan sovereigns reled over Southern India

The Southic artists in the ancient Naga and so called 5 other the section in its in the ancient read and to chied and Naci remnints of rices in individual Districts. They have attected on the character of the whole poulation, and profounda Hinduism influenced the religious beliefs and domes in institutions of India In the Vera we see highly developed communities of the Ayan stock, worshipping bright and triendly gods, honour is woman, and assigning to her in amagnetic position in the family life. Husland and was were the Dan are or joint rulers of the Irdo Arvin household. Iridi ons of the freedom of woman in ong the incient Arvon - tilers survive in the savajam ara or Muden's Own Choice of a Husband, in the coic roems

The curtim of Vedic and Post Vedic internture falls upon On the the scene before the 5th century i.e. When the curtain rises religion on the domestic and religious life of medica il In la, in the domestic

1 See CENTRAL PROVINCES 7. In the Governor The Caulis modern are locally believed to have been earlier fort builders than the Gonds (see India for example, article SAONER', and some of the Gond chiefs trace their descent through 54 generations to a well recorded ancestor assigned to 91 AD (see The Imper al Ga e to e of Inta, while NAKINGHAK)

Puranas about the 10th century AD, a vast change has taken place The people are no longer sharply divided into civilised Aryans and rude non-Aryans, but into castes of a great mixed Their religion is no longer a worship of bright population and friendly gods, but a composite product of Aryan spiritual conceptions and non-Aryan superstitions The position of woman has also altered for the worse Husband and wife are no longer 'joint rulers' of the household. The Muden's Own Choice has fallen into disuse, or survived only as a Court pageant the custom of child-marriage has grown up. The widow has been condemned to a life of privation, or has been taught the ment of extinguishing her existence on her husband's funeral pile

The appeal to the Veca

The following chapter will exhibit this amorphous growth, populir'i known as Hinduism Orthodox Hindus are uniortunately in the habit of claiming the authority of the Veda for their medizeval institutions for the cyil as well as for the good. As a matter of fact, these institutions are the joint product of non-Arran darkness and of Arran light South c, and Nazi, and so-called aboriginal ruces with their indifference to human suffering their polyandric bouseholds and their worship of fear and blood have left their mark deep in th. Hin 'u law-codes in the terrorizing of the Hindu religion and in the degradation of woman. I notish scholarship has shown that the worst feature of Hindu sne widow burning had no authority in the Veda. When it is equally well understood that the darker features of Hinduism as a whole rest not upon the Vedic scriptures, but are the result of a human compromise with non Aryan barbarism, the task of the Indian reformer will be half accomplished. It is with a true popular instinct that the great religious movements of India in our day reject the authority of mediaval Hirduism and appeal back to the Vida.

## CHAPTER VIII

## R SE OF HINDLISM (750 TO 1520 AD)

TROM these diverse races pre-Aryan, Aryan, and Scythic, Rise or The task of HINDL the population of India has been made up organizing them fell to the Brahmans. That ancient caste, which had never quitted the scene even during the height of the Buddhistic supremacy, stepped forward to the front of the stage upon the decay of the Buddhist faith Chinese pillarim, about 640 and had found Brahmanism and Buddhism coexisting throughout India. The conflict of creeds brought forth a great line of Brahman apostles from the 6th to the 16th century 1D with occasional successors down to our own day. The disintegration of Buddhism as we have seen, occupied many hundred years, perhaps from 300 to 1000 1 D 1

The Hindus take the 8th century as the turning point in the Kumaria struggle About 750 and, arose a holy Brahman of Bengal, 750 Kumarila Bhatta by name, preaching the old Vedic doctrine of a personal Creator and God Before this realistic theology the impersonal abstractions of the Buddhists succumbed and according to a later legend, the reformer wielded the sword of the flesh not less trenchantly than the weapons of the spirit A Sanskrit writer, Madhaya Acharya on the 14th century a D relates how Sudhanwan a prince in Southern India com minded his servants to put to death the old men and the Persecu children of the Buddhists from the bridge of Rama [the ridge tion (?) of buddhism of reefs which connects India with Cevlon) to the Snowy Mountain let him who slays not, be slain -

I from the language of the Saddhama Punduika translated into Chinese before the end of the ord century to, II II Wilson infers that even at that culy date the cureer of the buddhists had not been one of uninterrupted success, although the opposition had not been such as to arrest their progress' (I same vol in p. 360 ed. 1802 of Buddhism in India is abundantly attested to 1000 1 D

2 Quoted by H. H. Wilson at subta. See 250 Lissen's Inat. I Alter thun skunge, vol n p 708, Colebrooke's Low, p 190

True value of the legend

It is needless to say that no sovereign existed at that time in India whose power to persecute extended from the Himá layas to Cape Comorin. So far as the legend has any truth, it refers to one of many local religious reprisals which took place at the Indian courts during the struggle between the Buddhists and the Bráhmans. Such reprisals recurred in later days, on a smaller scale between the rival Hindu sects. The legend of Kumárila is significant, however, as placing on a religious basis the series of many-sided evolutions which resulted in Hinduism. These evolutions were the result of ethnical processes more subtle than the scheming of any caste of men. The Brahmans gave a direction to Hinduism, but it was the natural development of the Indian races which produced it

Twofold basis of Hindu ism, caste and religion. Hinduism is a social organization and a religious confederacy. As a social organization, it rests upon caste, with its roots deep down in the ethnical elements of the Indian people. As a religious confederacy, it represents the coalition of the old Vedic faith of the Brahinans with Buddhism on the one hand, and with the ruder rites of the pre Arjan and Indo-Scythic races on the other

( aste basis of Hinduism.

The race on to of case

The ethnical basis of caste is disclosed in the fourfold division of the people into the 'twice-born' Aryan castes, including the Brahmans, Kshattriyas (Rajputs) and Vaisyas, and the 'once born' non-Aryan Sudras The Census proves that this ciassification remains the fundamental one to the present day The three 'twice born castes still wear the sacred thread, and claim a joint, although an unequal, inheritance in the holy The 'once-born' castes are still denied books of the Veda the sacred thread, and their initiation into the old religious literature of the Indo Arvans has only been effected by the secular teaching of our Anglo-Indian schools. But while caste has thus its foundations deep in the distinctions of race, its superstructure is regulated by another system of division, based on the occupations of the people. The early classification of the people may be expressed either ethnically as 'twice-born' Aryans, and 'once-born' non Aryans or socially, as priests, warmors, husbandmen, and serfs. On these two principles of classification, according to race and to employment, still further modified by geographical position, has been built up the ethnical and social organization of Indian caste

Modified by 'occu pation' and 'locality'

Corrplexity of caste From the resulting cross-divisions arises an excessive complexity, which renders any brief exposition of caste superficial. As a rule, it may be said that the Aryan or 'twice-born' castes adhere most closely to the ethnical principle of

division, the 'once-born' or distinctly non-Aryan to the same principle, but profoundly modified by the concurrent principle of employment, while the mixed progeny of the two are classified solely according to their occupation But even Even the among the Bráhmans, whose pride of race and continuity of Brahmans not an tradition should render them the firmest ethnical unit among ethnical the Indian castes, classification by employment and by geo-unit graphical situation plays a very important part, and the Brahmans, so far from being a compact unit, are made up of several hundred castes, who cannot intermarry, nor eat food cooked by each other They follow every employment, from the calm pandits of Behar in their stainless white robes, and the haughty priests of Benares, to the potato growing Bráhmans of Orissa, 'half naked peasants, struggling along under their baskets of yams, with a filthy little Bráhmanical thread over their shoulder'1

In many parts of India, Brahmans may be found earning The Brah their livelihood as porters, shepherds, cultivators, potters, and man caste fishermen, side by side with others who would rather starve analyzed and see their wives and little ones die of hunger, than demean themselves to manual labour, or allow food prepared by a man of inferior caste to pass their lips Classification by locality introduces another set of distinctions among the In Lower Bengal jails, a convict Brahman from Behar or the North-Western Provinces used to be highly valued, as the only person who could prepare food for all classes of Bráhman prisoners In 1864, the author saw a Bráhman felon try to starve himself to death, and submit to a flogging rather than eat his food, on account of scruples as to whether the birthplace of the North-Western Brahman who had cooked it, was equal in sanctity to his own native district. Bráhmans are popularly divided into ten great septs, according to their locality, five on the north, and five on the south of the Vindhya range 2 But the minor distinctions are innumer-Thus, the first of the five northern Brahman septs the able

<sup>1</sup> See Hunter's Orissa, vol 1 pp 238 et seq (ed 1872) where 25 pages are devoted to the diversities of the Brahmans in occupation and race Also Hindu Tribes and Castis, by the Rev M A Sherring, Introd. xxi vol 11 (4to, Calcutta, 1879)

<sup>&</sup>lt;sup>2</sup> Thus tabulated according to a Sanskrit mnemonic Sloka —

I The five Gauras north of the Vindhya range-

<sup>(1)</sup> The Sárasurtas, so called from the country watered by the river Saraswati.

<sup>(2)</sup> The Kanjakubjas, so called from the Kanjakubja or Kanauj country

Sáraswatas in the Punjab, consist of 469 classes 1 Sherring enumerated 1886 separate Bráhmanical tribes 2 Dr. Wilson, of Bombay, carried his learned work on Caste to the length of two volumes, aggregating 678 pages, before his death, but he had not completed his analysis of even a single caste—the Bráhmans

The lower more com plex

It will be readily understood therefore, how numerous are castes still the sub-divisions and how complex is the constitution, of the lower castes The Rájputs now number 590 separatelynamed tribes in different parts of India 3. But a process of synthesis as well as of analysis has been going on among the Indian peoples In many outlying Provinces, we see non-Arran chiefs and warlike tribes turn into Arran Raiputs before our eyes4 Wellknown legends have been handed down of large bodies of aliens being incorporated from time to time even into the Brahman caste 5. But besides these 'manufactured Brahmans' and the ethnical syncretisms which they represent, there has been a steady process of amalgamation among the Hindus by mixed marriage.6 The Sudras, savs Mr Sherring, 'dist lay a great intermingling of races. Every caste exhibits this confusion. They form a living and practical testimony to the fact that in former times the upper and lower classes of native society by which I

The bui 1 irg up of cas'us

- (3) The Gauras proper, so called from Grar, if the country of the Lower (ranges
- (4) The L' a'as, of the Province of L'kala or Odra (Orissa)
- (5) The Mai like, of the Province of Muhia (T rhut
- II The five Dravilas south of the Vindlya range-
  - (1) The Wahd ashtra of the country of the Marathi language
  - (2) The Aninras or Ianan, as, of the council of the Telugu language
  - (3) The Dinidas proper, of the country of the Dinisihan or Tami' language
  - (4) The Kurnatas, of the Karnatika, or the country of the Canarese language
  - (5) The Gurjaras, of Gurjarashtra, or the country of the Gujman language
- 1 Compiled by Pan lit Radha Krishna, quoted by Dr. J. Wil on, Indian ( aste, part it. pp 126-133.
  - Hindu Tribes and Castes, pp xxii xlvi vol a 14to, Calcutta, 18791
  - 4 See Sherring, Hindu Fribes and Castes, vol it pp. lv -lxv
  - See Sherring, Hindu Tribes and La les, vol 11 p levil
- "Hunter's Orisia, vol 1. p 247 (in Oudh), p 245 (in Bhagalpurt, p. 254 (in Malabar), etc.
- 6 See two interesting articles from opposite points of view, on the synthetic aspects of casie, by the Rev. Mr. Sherring, of Benares, and la Josendra Chandra Ghose, in the Calcutta Ret 1 11, Oct 1880

mean the Hindu and non-Hindu population of India, formed alliances with one another on a prodigious scale, and that the offspring of these alliances were in many instances gathered together into separate castes and denominated Súdras '1

The Hindu custom now forbids marriage between (1) per- The slow sons of the same gotra or kindred, and (2) persons of different development of castes But this precise double rule has been arrived at only Hindu after many intermediate experiments in endogamous and evo-marriage gamous tribal life 
The transitions are typified by the polyandry of Draupadı in the Mahábhárata, and by many caste customs relating to marriage, inheritance, and the family tie, which survive to this day Such survivals constitute an important branch of law, in fact, the domestic 'common law' of India,2 and furnish one of the chief difficulties in the way of Anglo-Indian codification Thus, to take a single point, the rule, Survivals regarding marriage exhibit every phase from the compulsory of the process polyandry of the old Nairs, the permissive polyandry of the Punjab lats, and the condonement of adultery with a husband's brother or kınsman among the Karakat Vellálars of Madura, to the law of Levirate among the Ahirs and Nunivas, the legal re-marriage of widows among the low-caste Hindus, and the stringent provisions against such re-marriages among the higher castes. At this day, the Nairs exhibit several of the stages in the advance from polyandric to monogamous institutions The conflict between polyandry and the more civilised marriage system of the Hindus is going on before our eyes in Malabar Among the Koils, although polyandry is forgotten, the right of disposing of a girl in marriage still belongs, in certain cases to the maternal uncle,—a relic of the polyandric system of succession through females This tribe also preserves the form of marriage by 'capture'

The Brahmanas indicate that the blood of the Hindus Ancient was, even in the early post-Vedic period, greatly intermingled a minghing The ancient marriage code recognised as lawful, unions of men of higher caste with females from any of the lower ones and their offspring 4 had a quite different social status from

<sup>1</sup> Calcutta herry, chi p 225

<sup>2</sup> Among many treatises on this subject, Arthur Steele's La . and Custom of Hindu Castes (1868) deals with Western India, Nelson . In cof Hindu Law (1877), and Burnell's Dayarthhaga, etc., may be quoted for the Madras Presidency, Beames' admirable edition of Sir Henry Elliots Trubes of the North Western Provinces, and Shering & Hindu Trib's (besides more strictly legal treatises), for Bungal

<sup>\*</sup> The Tautterly a Brahmana of the Krishin Yajur Veda (quoted by Dr I Wilson, Caste, 1 pp 127-132) enumerates 159 castes 4 Anniena

the progeny 1 of illicit concubinage. The laws of Manu disclose how widely such connections had influenced the structure of Indian society 2000 years ago, and the Census proves that the mixed castes still form the great body of the In dealing with Indian caste, we must Hindu population therefore allow, not only for the ethnical and geographical elements into which it is resolvable, but also for the synthetic processes by which it has been built up

The 'oc cupation basis of caste

Changes of focus jaion' bi castes

The same remark applies to the other principle of classification on which caste rests, namely, according to the employments of the people. On the one hand, there has been a tendency to crect every separate employment in each separate Province into a distinct caste. On the other hand, there has been a practice (which European observers are apt to overlook) of the lower castes changing their occupation, and in some cases deliberately rusing themselves in the social scale Thus the Vaisya caste, literally the tis or general body of the Arvan settlers, were in ancient times the tillers of the soil. They have abandoned this laborious occupation to the Sudra and mixed castes, and are now the merchants and 'Fair in complexion,' writes the most bankers of India. accurate of recent students of caste? 'with rather delicate features, and a certain refinement depicted on their countenances sharp of eye, intelligent of face, and polite of The Vais- bearing, the Vaistas 'must have radically changed since the days when their forefathers delved sowed, and reasted ' Indeed, so great is the change that a heated controversy is going on in Hindu society as to whether the Bengali hamyas, or merchant bankers are really of Vaisya descent or of a higher origin

125

Gold smiths of Ma iras

Such a rise in the social scale is usually the unconscious work of time, but there are also legends of distinct acts of selfassertion by individual castes. In Southern India, the goldsmiths strenuously resisted the rule of the Brahmans, and for ages claimed to be the true spiritual guides, styling themselves acharyas, 'religious teachers,' and wearing the sacred thread Their pretensions are supposed to have given rise to the great division of castes in Madras into the 'Right hand,' or the cultivating and trading castes who supported the Bráhmans,

For an arrangement of 134 Indian castes, according to their origin, or 'procession' from (1) regular full marriage by members of the same caste, (2) anuloma, (3) pratitiona, (4) Vrátya Santati, (5) adultery, (6) incest, (7) degeneration, Wilson, Indian Caste, ii pp 39-70

\* The Rev M A Sherring (deceased, alas, since the above was written, after a life of noble devotion and self-acrifice to the Indian people), Calcutta Revier October 1880, p 220.

and the 'Left-hand,' chiefly craftsmen who sided with the artisan opposition to Bráhman supremacy 1

In Bengal, a similar opposition came from the literary class The The Dattas, a sept of the Kayasth or writer caste, re- of Bengal nounced the position assigned to them in the classification of Hindu society They claimed to rank next to the Brahmans. and thus above all the other castes They failed, but a native author 2 states that one of their body, within the memory of men still living, maintained his title, and wore the sacred thread of the pure 'twice-born' The Statistical Survey of India has disclosed many self-assertions of this sort, although of a more gradual character and on a smaller scale Thus, in Eastern Bengal, where land is plentiful, the Shahas, a section of the Suris or degraded spirit-sellers, have. The in our own time, advanced themselves first into a respectable Shahas cultivating caste, and then into prosperous traders Some of . the Telis or oil-pressers in Dacca District, and certain of the Telis, I ámbulís or pán-growers in Rangpur, have in like manner fambulis, risen above their hereditary callings, and become bankers and grain merchants These examples do not include the general opening of professions, effected by English education—the great solvent of caste

There is therefore a plasticity as well as a rigidity in caste. Plasticity Its plasticity has enabled caste to adapt itself to widely and rigidity in separated stages of social progress, and to incorporate caste the various ethnical elements which make up the Indian people Its rigidity has given strength and permanence to the corporate body thus formed Hinduism is internally loosely coherent, but it has great powers of resistance to guild, a mutual assurance society, and a religious sect. As a system of trade trade-union, it insists on the proper training of the vouth of guilds its craft, regulates the wages of its members, deals with tradedelinquents, and promotes good fellowship by social gatherings The famous fabrics of mediæval India, and the chief local industries in our own day, were developed under the supervision of caste or trade guilds of this sort. Such guilds may still be found in many parts of India, but not always with the same complete development 9

<sup>&</sup>lt;sup>1</sup> This subject is involved in much obscurity. The above sentences embody the explanation given in Nelson's I aw of the Hindu Law, as administered by the High Court of Vadras, p 140 (Madras, 1877)

I Jogendra Chandra Ghose, Calcutta Return, cala p 279 (October 1880)

Ihe Statistical Accounts or Gazetteers of the Bombay Districts devote a special section to such trade guilds in every District

regulation of wages.

In Ahmadabad District 1 each trade forms a separate guild All heads of artisan households are ranged under their proper guild The objects of the guild are to regulate competition among the members, and to uphold the interest of the body in disputes with other craftsmen. To moderate competition, the guild appoints certain days as trade holidays, when any member who works is punished by a fine case occurred in 1873 among the Ahmadábad bricklayers Men of this class sometimes added 3d to their daily wages by working extra time in the early morning Rut several families were thereby thrown out of employment. ingly the guild met, and decided that as there was not employment for all, no man should be allowed to work extra time

Working of the rade Lims

The decisions of the guild are enforced by fines. offender refuses to pay and the members of the guild all belong to one caste, the offender is put out of caste guild contains men of different castes the guild uses its influence with other guilds to prevent the recusant member from getting work The guild also acts in its corporate capacity against other crafts. For example in 1872, the Ahmadabad cloth-dealers resolved among themselves to reduce the rates paid to the sizers or taguas guild refused to prepare cloth at the lower rates, and An Indian remained six weeks on strike. At length a compromise was arrived at, and both guilds signed a stamped agreement

Besides its punitive fines the guild draws in income from

strike '

fees levied on persons beginning to practise its craft custom prevails at Ahmadabad in the cloth and other industries But no fee is paid by potters carpenters, and inferior artisans An exception is made, too, in the case of a son succeeding to his father, when nothing need be paid. In other cases, the amount varies, in proportion to the importance of the trade. from £5 to £50 The revenue from these fees and from punitive fines is expended in feasts to the members of the guild, in the support of poor craftsmen or their orphans, and in charity A favourite device for raising money in Surat is for the members of a trade to agree to keep a certain date as a holiday, and to shut up all their shops except one. The right

(mld funds.

Coull charities

bid is credited to the guild-fund Within the guild, the interests of the common trade often Tradeinterests z caste

supersede the race element of the theoretically common caste Thus, in Surat, each class of craftsmen, although including men

1 See the article, The Imper al Cazitteer of India

to keep open this one shop is let by auction, and the amount

of different castes and races, combine to form a guild, with a council, a head-man, and a common purse for charity and entertainments In Ahmadábád, Broach, and many industrial in trade centres, the trade organization into guilds co exists with, or centres, dominates, the race-structure of caste A twofold organization also appears in the village community Caste regulates the in the viltheoretical position of every family within it, but the low-lage community castes often claim the headship in the village government

In Barásat Sub-district in Bengal, of 5818 enumerated Low caste Village Heads, only 15 were Brahmans or Rajputs, 4 were Village Heads Káyasths, while 3524 belonged to the Sudra or inferior castes, down to the detested cow-skinners and corpse-bearers, the residue being Muhammadans, with 13 native Christians Southern India, the Village Head is sometimes of so low a caste that he cannot sit under the same roof with his colleagues in the village government. He therefore hands up his staff, which is set in the place of honour, while he himself squats on the ground outside The trade-guild in the cities, and the Caste and village community throughout the country, act, together with 'mutual insurance', caste, as mutual assurance societies, and under normal conditions allow none of their members to starve Caste, and the No 'poor trading or agricultural guilds concurrent with it, take the place law' in of a poor-law in India.

It is obvious that such an organization must have some Caste weapons for defending itself against lazy or unworthy members rewards The responsibility which the caste discharges with regard to feeding its poor, would otherwise be liable to abuses matter of fact, the caste or guild exercises a surveillance over each of its members, from the close of childhood urtil death If a man behaves well, he will rise to an honoured place in his caste, and the desire for such local distinctions exercises an important influence in the life of a Hindu caste has its punishments as well as its rewards Those Caste pun-The fine ishments punishments consist of fine and excommunication usually takes the form of a compulsory feast to the male members of the caste. This is the ordinary means of purification, or of making amends for breaches of the caste code

Excommunication inflicts three penalties First an interdict Excommuagainst eating with the fellow members of the caste. Second, mication an interdict against marriage within the caste. This practically amounts to debarring the delinquent and his family from respectable marriages of any sort. Third, cutting off the delinquent from the general community, by forbidding him the use of the village barber and washerman, and of the

priestly adviser Except in very serious cases, excommunication is withdrawn upon the submission of the offender, and his payment of a fine Anglo-Indian law does not enforce caste-decrees. But caste punishments exercise an efficacious restraint upon unworthy members of the community, precisely as caste rewards supply a powerful motive of action to good ones. A member who cannot be controlled by this mixed discipline of punishment and reward is eventually expelled, and, as a rule, an 'out-caste' is really a bad man. Imprisonment in juil carries with it that penalty, but may be condoned after release by heavy expiations

Recapitul Intion of caste Such is a brief survey of the nature and operation of caste But the cross-divisions on which the institution rests, its conflicting principles of classification according to race, employment, and locality, the influence of Islam in Northern India, of the 'right-handed' and 'left handed' branches in the South, 1 and the modifications everwhere effected by social or sectarian movements, render a short account of caste full of difficulties

The religious bas sof Hinduism

Hinduism is, however, not only a social organization resting upon caste it is also a religious federation based upon worship As the various race elements of the Indian people have been welded into caste, so the simple old beliefs of the Veda, the mild doctrines of Buddha, and the ficrce rites of the non Arvan tribes have been thrown into the melting pot. and poured out thence as a mixture of alloy and dross to be worked up into the Hindu gods. In the religious as in the social structure, the Brahmans supplied the directing prain-But both processes resulted from laws of human power evolution, deeper than the workings of any individual will, and in both, the product has been, not an artificial manufacture, but a natural development. Hinduism increly forms one link in the golden chain of Indian religions. We have seen that the career of Buddha was but a combination of the ascetic and the heroic Aryan life as recorded in the Indian epics. Indeed, the discipline of the Buddhists organized so faithfully the prescribed stages of a Bráhman's existence, that it is difficult to decide whether the Surmanai of Megasthenes were Buddhist clergy or Brahman recluses. If accurate scholarshin cannot accept Buddhism as simply the Sankhya philosophy turned into a national religion, it admits that Buddhism is a natural development from Bráhmanism An carly set of

Its stages of evolution.

<sup>1</sup> See Crole's Statistical Account of Chingleput District, pp 33, 34 (1879)

intermediate links is found in the darsanas, or philosophical systems, between the Vedic period and the establishment of Buddhism as a national religion under Asoka (1400? to 250 A later set is preserved in the compromises effected during the final struggle between Buddhism and Bráhmanism. ending in the re-assertion of the latter in its new form as the religion of the Hindus (700 to 1000 AD)

Buddhism not only breathed into the new birth its noble Buddhist spirit of charity, but bequeathed to Hinduism many of its influences on Hininstitutions unimpaired, together with its scheme of religious duism life, and the material fabric of its worship. At this day, the mahájan or bankers' guild, in Surat, devotes part of the fees that it levies on bills of exchange to animal hospitals, true Beast survivals of Asoka's second edict, which provided a system hospitals of medical aid for beasts, 250 years before Christ cenobitic life, and the division of the people into laity and clergy, have passed almost unchanged from Buddhism into the present Hindu sects, such as the Vaishnays or Vishnuites

I he Hindu monasteries in our own day vie with the Buddhist Monasconvents in the reign of Siladitya, and Puri is, in many respects, teries a modern unlettered Nalanda The religious houses of the Orissa delta, with their revenue of £50,000 a year,1 are but Hindu developments of the Buddhist cells and rock monasteries, whose remains still honeycomb the adjacent hills.

If we examine the religious life of the Vishnuite commu nities, we find their rules are Buddhistic, with Bráhmanical I hus the moral code of the Kabir-panthis The reli reasons attached consists of five rules 2 kirst, life, whether of man or beast, gious life must not be violated because it is the gift of God. humanity is the cardinal virtue, and the shedding of blood, whether of man or beast, a hemous crime Third, truth is the great principle of conduct, because all the ills of life and ignorance of God are due to original falsehood (maya) Fourth, retirement from the world is desirable, because the desires of the world are hostile to tranquillity of soul, and to Fifth, obedience to the the undisturbed meditation on God spiritual guide is incumbent on all. This last rule is common to every sect of the Hindus But the Kabir-panthis direct the pupil to examine well his teacher's life and doctrine before

<sup>1</sup> Report by the Committee of name gentlemen appointed to inquire into the Orissa maths, dated 25th March 1869 par 15

H H II Wilson . Kelegion of the Hendus, vol 1 p. 94 (ed 1862)

he resigns himself to his control. If we did not know that Buddhism was itself an outgrowth from primitive Bráhmanism. we might hold this code to be simple Buddhism, with the addition of a personal God But knowing, as we do, that Brahmanism and Buddhism were themselves closely connected, and that they combined to form Hinduism, it is impossible to discriminate how far Hinduism was made up by direct transmission from Buddhism or from Bráhmanism

The influence of Buddhism on the Christianity of the western

Buddhist influences on la er rea\_109%

world has been referred to at p 152 Whatever uncertainties may still obscure that question, the effect of Buddhism upon the present faiths of Eastern Asia admits of no doubt best elements in the teaching of Buddha have survived in modern Hinduism, and Buddhism carried with it assential doctrines of Brahmanism to China and Japan, together with certain characteristics of Indian religious art The snake ornamentation which figures so universally in the religion of India, is said to have been carried by Buddhism alike to the east and the west. Thus, the canopy or baldachino over Hinduism, Buddha's head delights in twisted pillars and wavy patterns. These wave-like ornaments are conventionalized into cloud curves in most of the Chinese and Japanese canonies, but some of them still exhibit the original figures thus symbolized as undulating serpents or Nagas haldachino of this sort may be seen in a monastery at Ningpo 1 It takes the place of the cobra headed croops, which in India shelters the head of Siva or of Vishnu as he slept upon the waters at the creation of the world The twisted columns which support the baldachino at St. Peters in Rome and the fluted ornamentation so common over Protestant pulpits, are said to have a serpentine origin, and an easiern source. The association of Buddha with two other fig res, in the Japanese temples, perhaps represents a recollection of the Brahman The Brahmanical idea of trinits, in its Buddhist development as Buddha, Dharma (the Law), and Sangha (the

ornamenta wn

Serve t

In Buddhism

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Coa's on of buchrsm with carlier religions.

India.

Buddhism readily coalesced with the pre-existing religions of primitive races. Thus, among the hill tribes of Eastern Bengal, we see the Khyaungthas or 'Children of the River,'

Congregation), deeply penetrates the faith. The Sacred Footh of Buddha at Ceylon is a reproduction of the phallic linga of

<sup>1</sup> The authority for this statement is an unpublished drawing by Miss Gordon Cumming

passing into Buddhists without giving up their aboriginal rites. In India, They still offer rice and fruits and flowers to the spirits of hill and stream, 1 and the Buddhist priests, although condemning the custom as unorthodox, do not very violently oppose it In In Japan Japan, a Buddhist saint visited the hill-slope of Hotoke Iwa in 767 AD, declared the local Shinto deity to be only a manifestation of Buddha, and so converted the old idolatrous highplace into a Buddhist shrine Buddhism has thus served as Shrines a link between the ancient faiths of India and the modern common to various worship of the eastern world It has given sanctity to the centres faiths of common pilgrimage, to which the great faiths of Asia resort Thus, the Siva-worshippers ascend the top of Adam's Peak in Adam's Ceylon, to adore the footprint of their phallic god, the Sitapada, the Buddhists repair to the spot to revere the same symbol as the footmark of Buddha, and the Muhammadans venerate it as a relic of Adam, the Semitic father of mankind

Many common shrines of a similar character exist in India Sakhi The famous place of pilgrimage at Sakhi Sarwar crowns the Saiwar high bank of a hill stream at the foot of the Sulaimán range. in the midst of desert scenery, well adapted to penitents who would mortify the flesh To this remote spot, the Muhammadans come in honour of a Musalman saint, the Sikhs to venerate a memorial of their theistic founder, Nanak and the Hindus to perform their own ablutions and rites. The mourt near Madras, associated in Catholic legend with the martyrdom of St Thomas, was originally a common hill-shrine for Muhammadans, Christians, and Hindus Such hill shrines for joint worship are usually either rock fortresses, like Kalinjar in the North-Western Provinces and Chunar overhanging the Ganges, or river islands, like the heautiful islet on the Indus just below the new railway bridge at Sakkar The object of common adoration is frequently a footmark in stone. This the Hindus venerate as the footprint of Vishnu or Siva (I is nupad or Strapad), while the Musalmans revere it as the footprint of Muhammad (Kadam-rasul) The mingled architecture of some of these pilgrim-sites attests the various races and creeds that combined to give them sanctity Buddhism, which in some respects was at first a revolt against Brahman supremacy, has done much to maintain the continuity between the ancient and the modern religions of India.

Hinduism, however, derived its elements not merely from i see Hunter's Statistical Account of Bengal, vol vi p 40, etc.

Non

the two ancient Aryan faiths, the Brahmanical and the Bud-Arvan elements in dhist In its popular aspects, it drew much of its strength, Hindusm and many of its rites, from the Nágá and other non-Aryan peoples of India. Buddhists and Brahmans alike endeavoured, during their long struggle, to enlist the masses on their side. The Naga kingdoms were divided, as we have seen, by the Chinese geographers into those which had accepted Buddhism and those which had not A chief feature Nagarites in Nága-worship was the reverence for dragons or tailed monsters. This reverence found its way into mediæval Buddhism, and became an important clement in Buddhist mythology The historian of Tree and Sement worship goes so far as to say that 'Buddhism was little more than a revival of the coarser superstitions of the aboriginal races, purified and refined by the application of Arvan morality '1

Serpent worship in Hinduism

> The great monastery of Nalanda owed its foundation to the supposed influence of a tailed monster, or Naga, in a neighbouring tank. Many Hindu temples still support colonics of sacred crocodiles, and the scholar who has approached the subject from the Chinese point of view, comes to the conclusion that no superstition was more deeply embedded in the [ancient] Hindu mind than reverence for Nagás or dragons Buddhism from the first had to contend as much against the under current of Nágá reverence in the popular mind, as against the supercitious opposition of the philosophic Brih man in the upper current. At last, as it would seem, driven to an extremity by the gathering cloud of persecution, the Buddhists sought escape by closing with the popular creed, and endeavouring to enlist the people against the priests, but with no further success than such a respite as might be included within some one hundred veirs'

Phallic. emblems ın Hındu (-m

This conception of the process is coloured by modern ideas, but there can be no doubt that Hinduism incorporated many aboriginal rites. It had to provide for the non-Aryan as well as for the Arvan elements of the population, and it combined the Brahmanism and Buddhism of the Aryans with the fetish-worship and religion of terror which swayed the non-Arvan races Some of its superstitions seem to have been brought by Turanian or Scythian migrations from Central Asia. Serpent-worship is closely allied to, if indeed it does

<sup>1</sup> Fergusson's Tree and Serpent Worship, pp 62, with footnote, et seq. (ato 1868) This view must be taken subject to limitations

<sup>2</sup> Calena of Buddhist Scriptures from the Chinese, 1p 415, 416 Samuel Beal (Truoner, 1871)

not take its origin in, that reverence for the symbols of human reproduction which formed one of the most widely-spread religions of pre-historic man Phallic or generative emblems are on earth what the sun is in the heavens The sun, as the type of celestial creative energy, was a primitive object of Arvan adoration Later Brahmanism, and its successor Hinduism, seem to have adopted not only the serpent, but the linga and The Hindu yons, or the terrestrial organs of male and female creative linga and energy, from the non-Aryan races The early Aryan ritual of the Vedas was addressed to the elements, particularly to Fire

The worship of the phallic emblem or linga finds only a doubtful sanction, it any at all, in those ancient scriptures, 1 but the Puránas disclose it in full vigour (1000 AD), and the Muhammadans found it in every part of India. It is not only the chief religion to the south of the Vindhyas, but it is universally recognised by the Hindus Such symbolism fitted well into the character of the third person of their triad-Siva, the Reproducer, as well as the All-Destrover To the Brah mans it supplied a popular basis for their abstruse doctrines regarding the male and female energy in nature Phallic The worship harmonized also with their tendency to supply each god 'creative with a correlative goddess, and furnished an easily-understood energy, symbolism for the Sakta sects, or worshippers of the divine creative power,2 so numerous among the Hindus semi-aboriginal tribes and half-Hinduized low-castes, this conception of Siva as the All-Destroyer and Reproducer organized on a philosophical basis their old religion of propitiation by blood 3

The fetish and tree worship of the non Iryan races also Fetish entered largely into Hinduism The first Figlishman 4 who worship in Hinduism tried to study the natives as they actually are, and not as the Brahmans described them, was struck by the universal prevalence of a worship quite distinct from that of the Hindu deities A Bengal village has usually its local god, which it adores The sit a gram

H H Wilson & Religion of the Hindue, vol 1 p 220 (cd 1802)

<sup>2</sup> Sakta

<sup>4</sup> The relation of these rites of the semi Hinduized low castes to the religion of the non Aryan races is treated at considerable length, from personal observation, in Hunter's Annals of hural hen, al, pp 127-136 and 194, 5th edition

Dr Francis Buchanan, who afterwards took the name of Humilton His survey of the North Lastern Districts of Bengal, 1807 13, forms a noble

take of the universe and its inscintable First Cause, to be high chapped, not by sacrifices, but by meditation, and in oping, in truth. The Smirta Britmans follow this philosophic diffe of his teaching, and of the religious houses which he founded some remain to this day, controlled from the parent monastery perched among the western ranges of Mysore.1 But Sankara realized that such a faith is for the few. To those who could not rise to so high a conception of the godhead, he allowed the practice of any rites prescribed by the Veda, or by later orthodox teachers, to whatsoever form of the godhead they might be addressed. Tradition fondly narrates that the founders of almost all the historical sects of Hinduism-Sivaites, Vishouites, Sauras, Sáktas, Gánapatyas, Bhairavas—were his disciples.\* But Siva-worship claims Sankara as its apostle in a special sense. Siva-worship represents the popular side of his teaching, and the piety of his followers has elevated Sankara into an incarnation of Siva himself.8

Nothing, however, is altogether new in Hinduism, and it is needless to say that Siva had won his way high up into the pantheon long before the preaching of Sankara, in the oth century A.D. Siva is the Rudra of the Vedas, as developed by Brahman philosophy, and adapted by Sankara and others to popular worship Rulira, the Storm-God of the Vedic hymns, had grown during this process into Siva, the Destroyer and Reproducer, as the third person of the Brahman triad. The Chinese pilgrims supply evidence of his worship before the 7th century A.D., while his dread wife had a temple at the southernmost point of India at the time of the Periplus (and century A.D.), and gave her name to Cape Comorin.\* Siva ranks high in the Mahábhárata, in various passages of uncertain date, but does not reach his full development till the Purinas, probably after the 10th century A.D. His worship in Bengal is said to have been formulated by Paramata Kalanala at Benares; but Sankara's teaching gave an impulse to it

" Wilson's Religion of the Hindus, vol. 1. p. 28 (1862).

\* Prom Kanniel or Kanya-kanairi, the Virgin Godden, a name of Dungit,

wife of Sixe.

<sup>1</sup> See SEINOIR: (The Imperial Gaustier of India) for a brief account of the chief-priest of the Smitta sect, which has its head-quarters in this momentary. Also the Statistical Account of Mysore and Coorg, by Lewis Rice, vol. 2. p. 413, etc. (Bangalore Government Press, 1876.)

This runk is singued for Sankara by Madhava Achirya in the agticentury A.D.; indeed, Siva's descent as Sankara is said to have been foreteld in the Shands Physics. Sankara is one of the names of Siva.

<sup>&</sup>quot;As Viewervan, or Lord of the Universe, under which more five to well the chief object of worship at Bonares.

Stronghous of a refer appears the soft the some energy and the some factors.

Common factors to the south of Sankaria's followers and appearing suc-

seers. Sive-worship became one of the two chief religious in India. As at once the Destroyer and Reproducer, Siva represented profound philosophical doctrines, and was early stronghised as being in a special sense the god of the Bulbmans. To them he was the symbol of death as merely a change of life, On the other hand, his terrible aspects, preserved in his long list Of mines from the Roarer (Rudra) of the Veda, to the Dread One (Bhima) of the modern Hindu Pantheon, well adapted Thin to the religion of fear and proprtiation pretalent among the ruder non-Aryan races. Siva, in his twofold character, Thus became the deity abke of the highest and of the lowest He is the Mahá-deva, or Great God of modern Finduism, and his wife is Devi, pre-eminently THE Goddess. His universal symbol is the lingu, the emblem of reprodiscrion: his sacred beast, the bull, connected with the same idea: a trident tops his temples.

His mages partake of his double nature. The Brahmanical conception is represented by his attitude as a fair-skinned man, refated in profound thought, the symbol of the fertilizing Ganges above his head, and the bull (emblem alike of procreation and of Aryan plough-tillage) near at hand. The wilder non-Aryan aspects of his character are signified by his necklace of skulls, this collar of twining serpents, his tiger-skin, and his club with a himsen head at the end. His five faces and four arms have also their significance from this double aspect of his character, Aryan and non-Aryan His wife, in like manner, appears in her Arvan form as Uma, 'Light,' the type of high-born loveliness, in her composite character as Durga, a golden-coloured woman. beautiful but menacing, riding on a tiger; and in her terrible non-Aryan aspects, as Kali, a black fury, of a hideous countenance, dripping with blood, crowned with snakes, and bung round with skulls.

As an Aryan denty, Siva is Pasu-pati, the Lord of Animals and the Protector of Cows, Sambhu, the Auspicious, Mrityun-jaya, the Vanduisher of Death, Viswanatha, Monarch of All. to his non-Aryan attributes, he is Aghora, the Horrible; Virus attributes, by Ugra, the Fierce; Kapila main,

A Sambled text declared flive to be the *delicit*, or special god of the Religious N. Vichna, of the Religious Beahma, of the Valeyes, and Remain of the Saleyes, and

La Trans (see 1001 trans, west

Garlanded with Skulls. So also Devi, his female form, as an Aiyan goddess is Uma, the lovely daughter of the mountain king. Himwat, <sup>2</sup> Arva the Revered, Gauri, the Brilliant or Gold coloured, Jagad Zumi, the World's Fair One, Bhavani, the Source of Existence and Jagan mata, the Mother of the Universe. Her non Arvin attributes appear in her names of Kali or Svama the Black One. Chandi the Ficice, Bharavi, the Jerrible. Raka danti, the Bloody Joothed.

The ritual of Sivaworship preserves, in an even more striking way, the traces of its double origin. The higher ands still adore the Godheid by silent contemplation, as preso thed he sankara without the aid of external rates. The order ary Praem in hangs a wreath of blossens, it aund the phalice a, or places before it offerings of flowers and fice. But the Tow castes four out the lives of countless victims at the feet of the term of Kin, and und little in time of postulence and omine tried in the ridespair to make the relentless godde's b human basis. Duri time e i h of 1866 in a temple to Ke's within recentles it ( ) ( ) a boy was found with his eck cut in ever start a open, and the still contled tongue emast out between the teen. In inother comple at Hulli of ranger station only 25 miles from Calcutta) the head was I it parore if a idol decked with flowers? Such cases are time spreads of the regular system of human sacrifices which we lase seen among the non-Arvin rules. They have nothing to do with the old mistic forum i media or n in offer no whether real or symbolical of the ancient Arvan tath ! but the, form an es escal part of the non-Arvin rengion of terror which demands that the a coter the need, the greater shall be the tirop lat on

such sacrifies are now forbidden, the by Hindu custom and English iaw. H. H. Wilsen found evidence that they were regularly officed by the Kapalika sect of Sivaite Hindus eight centuries ago, and representatives of those

Menarch of the Hir alayas

The Calculty Englishman of 19th May 1853 Inn. of Kurel Inn. ..., 128 5th edition

A hearing he katully will che u

<sup>\* ~</sup> In Hugs On n of 1 1 a cm, 5 (I cma 1563) The Isr white of the hi Veda, x 90 veres 7 15 und the I noshe me that is at a chi brunmana, 1 2, 3 6 where 6 will be and of the Attrix is I rinniana, 1 6, with other paralises and throughout In Mun ransker I leads, seem to have an adequical and noshed sign hance, rather than traffer to 2 roll actifice. See a Will it I ray on Human Sacrifice, finally It So, vil var of 1822.

hideous votaries of Siva, 'smeared with ashes from the funeral pile, and their necks hung round with human skulls,' survive to this day 1 Colonel Keatinge mentions that he has seen old sacrificial troughs near Jaintiapur, now used only for goats. which exactly fitted the size of a man The new troughs are reduced to the dimensions of the animals at present offered, and the greater length of the ancient ones is explained by a legend of human sacrifices The Statistical Survey of India has brought to light many traditions of such offerings The hill tribes between Sylhet and Assam hunt a monkey at sowing time, and crucify it on the margin of the village lands, apparently as a substitute for the Spring man-sacrifice 2 A human life was sometimes devoted to the preservation of an artificial lake, or of a river embankment, a watchman of aboriginal descent being sacrificed 3 or a virgin princess walled up in the breach 4

Another Sivaite festival was the Charak Puja, or Hook-Swing ing Festival, during which men were suspended from a pole by a hook thrust through the muscies of the back, and then swung in the air, in honour of Kali In 1363, the orders of Govern ment for abolishing this festival were carried out in a border District, Bubhum lying between the Hindu plains and the gines, and only half-Hinduized, assembled round the poles and forctold famine from the loss of their old propitiatory As they thought the Spring ceremonies absolutely essential before commencing tillage, the British officer suggested they might swing a man by a rope round his waist instead of with a hook through his back. This compromise was accepted by some, but the better informed cultivators gloomily assured the officer that the ceremonies would have no good effect on the crops without the spilling of blood?

The thirteen chief sects of Siva-worshippers faithfully represent the composite character of their god. Sankara left behind him a succession of teachers many of whom rose to the rank of religious founders. The Smarta Brahmans still maintain their life of calm monastic piety. The Dandis,

<sup>1</sup> H H Wilson's Religion of the Hinau vol 1 p 264.

<sup>2</sup> As among the Kandh, ante, chap in

See SAKKASPASSA The Imperial true her of India

<sup>\*</sup> See Anantasacakan, The Imperial (ra effect of India

It is right to say that very little blood was lost, and the wounds caused were slight, indeed, slighter than those sometimes left behind by the skewers which were fixed through the cheek or tongue of the swinger during the performance

or ascetics, divide their time between begging and meditation Some of them adore, without rites Siva as the third person of the Aryan triad Others practise an apparently non Aryan ceremony of initiation by drawing blood from the inner part of the novice's knee as an offering to the god in his more terrible form Bhurnya The Dandis follow the non-Aryan custom of burying their dead or commit the body to some sacred stream? The logis include every class of devotee, from the speechless mystic who, by long suppressions of the breath, loses the consciousness of existence in an unearthly union with Six1 to the impostor who sits upon hir, and the auggler who travels with a performing goat. The thirteen Siva te sects descend through various gradations of self mortification and abstruction, to the letter's, whose abnegation extends to enting carrion or even burnan corpses, and gashing their own bodies with knives

Within the last few years a small labori community took up their abode in a deserted building on the top of a mount near Upair. To inspire terror and respect, they descended to the burning chat sautched the chaired bodies from the tuneral pile and retreated with them to their hill. The horror-stricken meariers complained to the local officer of the Maharaja Sindha hat did not dere to detend their dead equinst the schalid ministers of Sixa. In the end, the Maharaja's officer by ensuring a regular staple of food for the devotees, put a stop to their depredations.

The lowest size to seets follow non Arian rather than Arian types, alike as regards their use of animal food and their ble ods worship. These non Arian types are however, spiritualized into a mystic symbolism by the Sivaite Saktas or worshippers of the creative energy in nature (Sita). The 'right hand' adorers follow the Arian ritual with the addition of an offering of blood. Their Tantias or religious works take the form of a dialogue between Siva and his lovely Arian bride, in which the end teaches her the true forms of prayer and ceremonial. But the left hand, wor hip is an organized five fold ritual, of incantition lust, gluttony, drunkenness, and fixed. The non-Aryan origin of these safet rites is attested.

<sup>&</sup>quot; (f the Santa sans the Damoslar river, one chip in

<sup>2</sup> Iral shinas on Bhaktas 5 The con-

<sup>\*</sup> Learly in he form of I major Parvatt

<sup>\*</sup> Vames of Vamacharis, whose worship compress the five fold Makara with aketh away allien, namely—mense (flesh, mat ya thin the symbol fivarian for early) mad a timeoxicating spirit, mathing (sexual nature see, num imposed gesticula in)

by the use of meats and drinks forbidden to all respectable Hindus, perhaps also by the community of women, possibly an unconscious survival of the non-Aryan forms of polyandry and primitive marriage by capture. The Kanchuliyas, one of the slowest of the Sivaite sects, not only enforce a community of women, but take measures to prevent the exercise of individual selection, and thus leave the matter entirely to divine chance. Even their orgies, however, are spiritualized into a mystic symbolism, and the Dread Goddess surely punishes the votary who enters on them merely to gratify his lusts

Siva-worship thus became a link between the highest and the lowest castes of Hindus. Vishnu, the second person of the Aryan triad, supplied a religion for the intermediate classes. Siva, as a philosophical conception of the Bráhmans, afforded small scope for legend, and the atrocities told of him and his wife in their terrible forms, as adapted to the non-Aryan masses, were little capable of refined literary treatment. But Vishnu, the Preserver, furnished a congenial theme for sacred romance. His religion appealed, not to the fears, but to the hopes of mankind. Siva-worship combined the Brahmanical doctrine of a personal God with non-tryan bloody rites, Vishnu-worship, in its final form as a popular religion, represents the coalition of the same Brahmanical doctrine of a personal God, with the Buddhist principle of the spiritual equality of man

Vishnu had always been a very human god, from the time I when he makes his appearance in the Veda as a solar mith, the 'Unconquerable Preserver' striding across the universe in g three steps 2. His later incarnations made him the familiar friend of man. Of these 'descents' 3 on earth, ten or twenty-I two in number, Vishnu-worship, with the unerring instinct of a

<sup>1</sup> Cf also the festival of the Rukmin ia an in irri at Puit See Hunter's Orissa, vol 1 p 131

<sup>&</sup>lt;sup>2</sup> Probably at first connected with the using zenith and setting of the sun in his daily course

In ten chief ones are (1) the Fish incurnation, (2) the Fortise, (3) the Boar, (4) the Man Lion (5) the Dwaif (6) Parasu rama or Kama with the Axe, (7) Rama or Kama chandia, (8) Krishna (9) Buddha, and (10) Kalki, the White Horse, yet to come. The first four are mythological beasts, perhaps representing the progress of animal life through the erus of fishes, reptiles, and manimals, developing into half-formed man. From mother aspect, the Fish represents the 3 m, or ovarian fertility, the Tortoise, the linga, the Boar, the terrestrial fertilizer, and the Man Lion, the celestral. These four appeared in the Satya Yuga, an

a popular religion, chose the two most beautiful and most human for adoration. As Ráma and Krishna, Vishnu attracted to himself innumerable loving legends. Rama, his seventh incarnation, was the hero of the Sanskrit epic, the Rámáyana. In his eighth incarnation, as Krishna, Vishnu becomes the high-souled prince of the other epic, the Mahábharata, he afterwards grew into the central figure of Indian pastoial poetry, was spiritualized into the supreme god of the Vishnuite Puianas, and now flourishes as the most popular deity of the Hindus.

The worship of Vishnu, in one phase or another, is the religion of the bulk of the middle classes—with its roots deep down in beautiful forms of non-Aryan nature-worship, and its top sending forth—branches among the most refined Brahmans and interior sets—It is a religion in all thing-graceful. Its gods are heroes or bright friendly beings, who walk and converse with men—Its legends breathe an almost Hellenic beauty—The pastoral simplicities and exquisite ritual of Vishnu belong to a later age than Siva-worship, with its pandering to the grosser superstitions of the masses. Whatever may be the philosophical priority of the two creeds, Vishnuism made its popular conquests at a later period than Sivine rates.

In the 11th century the Vishmute doctrines were gathered into a religious treatise. He I ishnu Purana dates from about 1045 × 1<sup>-1</sup> and probably represents, as indeed its name implies, fancent traditions which had coexisted with Sivaism and Buddhism for centuries. It derived its doctrines from the Vedas not, however, in a direct of much, but filtered through the two great epic poems, the Ramiyana and the Mahabharata. The Vishnu Purana forms one of the eighteen Puranas or Sanskrit theological works, in which the Branman moulders of Vishnuism and Sivaism embodied their rivil systems. These works especially extol the second and third members of the Hindu triad, now claiming the pre-eminence for Vishnuism

as renomical period anterior to the present world. The fifth or dwarf is carnation represent a carly man in the first Yuga or second astronomical period, also long anterior to the present mundanc one. The next three incarnations represent the Heroic Age, the ninth or Buddha, the Religious Age. The tenth stands for the end of all things, according to the Hindu spiculypse, when Vishin shall appear on a white horse, a drawn sworl is one like a comet, in his hand, for the destruction of the wicked and the renovation of the world. The Bidgatata Pirana gives twenty two in a rations of Vishini

Preface to the Intima Israna III II Wilson, 1 usis (ed. 1864)

as the sole deity, and now for Siva, but in their higher flights rising to a recognition that both are but forms for representing the one eternal God. Their interminable dialogues are said to run to 1,600,000 lines 1. But they exhibit only the Brahmanical aspect of what were destined to become the two national faiths of India, and they are devoid of any genuine sympathy for the people

The Vishnu Purana starts with an intolerance equal to that of the ancient code of Manu It still declares the priests to have sprung from the mouth, and the low-castes i from the feet, of God 2 Its stately theogony disdains to touch the legends of the people It declares, indeed, that there is One God, but He is the God of the Brahmans, to whom He gives the earth as an inheritance, and in His eyes the ruder Indian races are as naught. This is the general tenor of its doctrines, although more enlightened, perhaps because later, passages occur In the Vishnu Purána, Buddha is still an arch-herctic, who teaches the masses to despise the Veda, but whose disciples are eventually crushed by the bright Aryan gods It is true that in the concluding book, when treating of the last Iron Age, to which this world has row come, some nobler idea of God's dealing with man gleams forth time of universal dissolution and darkness, the sage consoles us with the assurance that devotion to Vishnu will suffice for salvation to all persons and to all castes?

Vishnuism had to preach a different doctrine before it could become, as it has for ages been a religion of the people. The first of the line of Vishnuite reformers was Ramanuja, a Brahman of Southern India. In the middle of the 12th century, he led a movement against the Sivaites, proclaiming the funity of God, under the title of Vishnu, the Cause and the creator of all things. Prosecuted by the Chola king, who tried to enforce Sivaite conformity throughout his dominions, Ramanuja fied to the Jain sovereign of Mysore. This prince he converted to the Vishnuite faith by expelling an evil spirit from his daughter. Seven hundred monasteries, of which four still remain, are said to have marked the spread of his doctrine before his death. Ramanuja accepted converts from every class, but it was reserved for his successors to formally enunciate the brotherhood of man

At the end of the 13th century AD, according to some

Preface to the Ushnu Purina, p xxiv II II Wilson (ed. 1864)

<sup>\*</sup> Lishnu Purána, lib i cap vi p 89 H H Wilson (ed. 1804)

<sup>\*</sup> I whom Purana, lib vi cap u H R Wilson, p canvil

authorities, or at the end of the 14th, according to others, the great reformation, which made Vishnu-worship a national religion of India, took place. Rámanand stands fifth in the apostolic succession from Rámánuja, and spread his doctrine through Northern India. He had his head-quarters in a monastery at Benares, but wandered from place to place preaching the One God under the name of Vishnu, and choosing twelve disciples, not from the priests or nobles, but among the despised castes. One of them was a leather dresser, another a harber, and the most distinguished of all was the reputed son of a weaver. The list shows that every caste found free entrance into the new creed.

The life of a disciple was no life of ease. He was called upon to forsike the world in a strictly literal sense, and to go about preaching or teaching, and living on alms. His old age found an asslum in some monastery of the brother-hood. Ramanuja had addressed himself chiefly to the pure Arvan castes, and wrote in the language of the Brahmans Ramanand appealed to the people, and the literature of his sect is in the dialects familiar to the masses. The Hindi vernicular owes its development into a written language, partly to the folk songs of the peasantry and the war-ballads of the Raiput court bards, but chiefly to the I terry requirements of the new popular faith. Vishnuism has deeply impressed itself on the modern dialects of Northern India.

Kabir, one of the twelve disciples of Ramanand, carried his doctrines throughout Bengal. As his master had laboured to gather together all castes of the Hindus into one common taith so Kabir, seeing that the Hindus were no longer the whole inhabitants of India, tried, about the beginning of the 15th century, to build up a religion that should embrace Hindu and Muhammadan alike. He rejected caste, denounced image worship, and condemned the hypocrisy and arrogance of the Brahmans. According to Kabir, the chief end of man is to obtain purity of life, and a perfect faith in God. The writings of his sect acknowledge that the god of the Hindu is also the god of the Musalman. His universal name is The

<sup>2</sup> The three best known sets of such religious treatises are—(1) the voluminous works ascribed to Kabir (circ. 1400 A D) and his followers, preserved at the head quarters of his sect, the Kabir Chaurá at Benares, (2) the Granth, or scriptures of various Bhagats or Vishnutte religious founders, especially of Dadu in Rajputana, and of the Sikh Gurus, beginning with Nanak (1469), and (3) the Bhaktamalu, or Roll of the Bink'as or apostles, the Golde: Legend of Vishnutam already referred to.

Inner, whether He be invoked as the Ali of the Muhammadans, ( or as the Ráma of the Hindus 'To Alí and to Ráma we owe c our life,' say the scriptures of his sect,1 'and should show like 1 tenderness to all who live What avails it to wash your mouth, 1 to count your beads, to bathe in holy streams, to bow in temples, if, whilst you mutter your prayers or journey on pilgrimage, deceitfulness is in your heart? The Hindu fasts every eleventh day, the Musalman on the Ramazán Who formed the remaining months and days, that you should venerate but If the Creator dwell in tabernacles, whose dwelling is the universe? The city of the Hindu god is to the east [Benares], the city of the Musalman god is to the west [Mecca], but explore your own heart, for there is the god, both of the Musalmans and of the Hindus Behold but One He to whom the world belongs, He is the in all things father of the worshippers alike of Alí and of Ráma. my guide, He is my priest'2 Kabír was pre eminently the Vishnuite apostle to Bengal, but his followers are also numerous in the Central Provinces, Gujarat, and the Deccan

Kabir's teaching marks another great stride in the Vishnuite reformation His master, Ramánand, had asserted an abstract equality of castes, because he identified the deity with the worshipper He had regarded the devotee as but a manifestation of the divinity, and no lowness of birth could degrade the godhead As Vishnu had taken the form of several of the inferior animals, such as the Boar and the Fish incarnations, so might he be born as a man of any caste Kabir accepted this doctrine, but he warmed it by an intense humanity the chances and changes of life, the varied lot of man, his differences in religion, his desires, hopes, fears, loves, are but the work of Májá, or illusion To recognise the one Divine Spirit under these manifold illusions, is to obtain emancipation That Rest is to be reached, not by and the Rest of the Soul burnt-offerings or sacrifices, but, according to Kabir, by faith (bhakti), by meditation on the Supreme, by keeping His holy names, Harl, Ram, Govind, for ever on the lips and in the heart

The labours of Kabir may be placed between 1380 and 11420 A.D. In 1486, Chaitanya was born who spread the Vishnuite doctrines under the worship of Jagannath, through out the deltas of Bengal and Orissa. Signs and wonders

<sup>&</sup>lt;sup>1</sup> The Vijak of Bhagodas, one of Kabir's disciples. The rival claims of the Hindus and Musalmans to kabir's body have already been mentioned <sup>2</sup> Sabda, lvi Abridged from H. H. Wilson's Work's, <sup>1</sup> 81 (ed. 1864)

attended Chaitanya through life, and during four centuries he has been worshipped as an incarnation of Vishnu Extricating ourselves from the halo of legend which surrounds and obscures the apostle, we know little of his private life except that he was the son of a Brahman settled at Nadiyá near Calcutta, that in his youth he married the daughter of a celebrated saint, that at the age of twenty-four he forsook the world, and, renouncing the state of a householder, repaired to Orissa, where he devoted the rest of his days to the propagation of the faith He disappeared miraculously in 1527 AD

With regard to Chaitanya's doctrine we have ample evidence No race or caste was beyond the pale of salvation Musalmans and Hindus shared his labours, and profited by his preaching He held that all men are alike capable of faith, and that all castes by faith become equally pure Implicit belief and incessant devotion were his watchwords templation rather than ritual was his pathway to salvation Obedience to the religious guide is the great characteristic of his sect, but he warned his disciples to respect their teachers as second fathers, and not as gods. The great end of his system, as of all Indian forms of worship, is the He held that such liberation does liberation of the soul not mean the mere annihilation of separate existence consists in nothing more than an entire freedom from the stains and the frailues of the body The liberated soul dwells for ever, either in a blessed region of perfect beauty and sinlessness, or it soars into the heaven of Vishnu himself, high above the myths and mirages of this world, where God appears no more in his mortal incarnations, or in any other form, but is known in his supreme essence 1

The followers of Chaitanya belong to every caste, but they acknowledge the rule of the descendants of the original disciples (gosdins) These gosdins now number 23,062 in Bengal alone. The sect is open alike to the married and the unmarried. It has its celibates and wandering mendicants, but its religious teachers are generally married men. They live with their wives and children in clusters of houses around a temple to Krishna, and in this way the adoration of

<sup>&</sup>lt;sup>1</sup> Besides the notices of Chaitanya in II II Wilson's works, the reader is referred to a very careful essay by Babu Jogendra Chandra Ghosh, entitled Chaitanya's Ethics (Calcutta, 1884) Mr Ghosh bases his works upon the original writings of Chaitanya and his followers. The present author is indebted to him for a correction of one year in the date of Chaitanya's larth, calculated from the Chaitanya Charitanrita.

Chaitanya has become a sort of family worship throughout Orissa. The landed gentry worship him with a daily ritual in household chapels dedicated to his name death, a sect arose among his followers, who asserted the spiritual independence of women 1 In their monastic enclosures, male and female cenobites live in celibacy, the women shaving their heads, with the exception of a single lock of hair The two sexes chant the praises of Vishnu and Chaitanya together, in hymn and solemn dance portant doctrine of the Vishnuite sects is their recognition of. the value of women as instructors of the outside female community For long, their female devotees were the only teachers admitted into the zanánas of good families in Bengal Fifty vears ago, they had effected a change for the better in the state of female education, and the value of such instruction was assigned as the cause of the sect having spread in Calcutta 2 Since that time, Vishnuite female ascetics of various sorts have entered the same field In some instances the bad crept in along with the good, and an effort made in 1863 to utilize them in the mechanism of Public Instruction failed 3

The analogy of woman's position in the Vishnuite sects to that assigned to her by ancient Buddhism is striking. But the analogy becomes more complete when the comparison is made with the extra-mural life of the modern Buddhist nun on the Punjab frontier. Thus, in Lahul (Lahaul) some of the nuns have not, as in Tibet, cloisters of their own. They are attached to monasteries, in which they reside only a few months of the year, and which they may permanently quit, either in order to marry or for other sufficient reasons. In 1868, there were seventy-one such Buddhist nuns in Lahul, able to read and write, and very closely resembling in their life and discipline the better orders of Vishnuite female devotees in Bengal One of them was sufficiently skilled in astronomy to calculate eclipses 4

The death of Chaitanya marked the beginning of a spiritual decline in Vishnu-worship About 1520, Vallabha-Swámi preached in Northern India that the liberation of the soul did not depend upon the mortification of the body, and that

<sup>1</sup> The Spashtha Dayakas

<sup>2</sup> Wilson's Religion of Hindus, vol 1 p 171 (ed 1862)

<sup>&</sup>lt;sup>3</sup> The official details of this interesting and once promising experiment at Dacca will be found in Appendix A to the Report of the Director of Public Instruction, Bengal, for 1863-64, pp 83-90, for 1864-65, pp 155-158, and in each subsequent Annual Report to 1869

<sup>4</sup> Sherring's Hindu Tribes, vol 11 p 9 (4to, Calcutta)

God was to be sought, not in nakedness and hunger and solitude, but amid the enjoyments of this life. An opulent sect had, from an early period, attached itself to the worship of Krishna and his bride Rádha, a mystic significance being, of course, assigned to their pastoral loves. Still more popular among women is the modern adoration of Krishna as the Bala Gopala, or the Infant Cowherd,—a faith perhaps unconsciously stimulated by the Catholic worship of the Divine Child. The sect, however, deny any connection of their Infant god with the babe Jesus, and maintain that their worship is a legitimate and natural development of Vishnuite conceptions. Another influence of Christianity on Hinduism may possibly be traced in the growing importance assigned by the Krishna sects to bhakti, or futh, as an ail-sufficient instrument of salvation.

Vallabhi-Swami was the apostle of Vishnuism as a religion of pleasure When he had finished his life's work, he descended into the Ganges, a brilliant flame arose from the spot, and, in the presence of a host of witnesses, his glorified form ascended to heaven The special object of his homage was Vishnu in his pastoral incarnation, in which he took the form of the divine youth Krishna and led an arcadian life in the forest Shady bowers, lovely women, exquisite viands, and everything that appeals to the sensuousness of a tropical race, are mingled in his worship. His daily ritual consists of eight services, in which Krishna's image, as a beautiful boy, is delicately bathed, anointed with essences, splendidly attired, and sumptuously fed The followers of the first Vishnuite reformers dwelt together in secluded monasteries, or went about scantily clothed, living upon alms But the Vallabhi Swami sect performs its devotions arrayed in costly apparel, anointed with oil, and perfumed with camphor or sandal It seeks its converts, not among weavers, or leatherdressers, or barbers, but among wealthy bankers and merchants, who look upon life as a thing to be enjoyed, and upon pilgrimage as a holiday excursion, or an opportunity for trade

In a religion of this sort, abuses are inevitable. It was a revolt against a system which taught that the soul could approach its Maker only by the mortification of the body. It declared that God was present in the cities and marts of men, not less than in the cave of the ascetic. Faith and love were its instruments of salvation, and voluptuous contemplation its approved spiritual state. It delighted to clothe the deity in a beautiful human form, and mystical amorous poems make a

large part of its canonical literature. One of its most valued theological treatises is entitled. The Ocean of Love, *Prem* L. *Ságar*, and although its nobler professors always recognised. Its spiritual character, to baser minds it has become simply a religion of pleasure. The loves of Rádhá and Krishna, that woodland pastoral redolent of a wild flower aroma as ethereal as the legend of Psyche and Cupid, are sometimes materialized into a sanction for licentious rites.

A few of the Vishnuite sects have been particularized in order to show the wide area of religious thought which they cover, and the composite conceptions of which their beliefs are made up. But any attempt at a complete catalogue of them 1 is beyond the scope of this work. H. H. Wilson divided them into twenty principal sects, and the branches or lesser to brotherhoods number not less than a hundred. Their series for religious founders continued until the present century, when they began to merge into the more purely theistic movements of our day. Indeed, the higher Vishnuite teachers have always been theistic. The Statistical Survey of India has disclosed many such reformations, from the Kartabhajás¹ of the Districts around Calcutta, to the Satnámis² of the Central Provinces

Some of these sects are poor local brotherhoods, with a single religious house, others have developed into widespread and wealthy bodies, while one theistic church has grown into a great nation, the Sikhs, the last military power I which we had to subdue in India 3 Nanak Shah, the spiritual? founder of the Sikhs, was nearly contemporary with Kabir, and taught doctrines in the Punjab but little differing from those of the Bengal apostle 4 The Vishnuite sects now include almost the whole population of Lower Bengal, excepting the very highest and the very lowest castes In many of their com munities, caste is not acknowledged. Such sects form brother I hoods which recognise only spiritual distinctions or degrees, b and a new social organization is thus provided for the unfortunate, the widow, or the out caste In lately Hinduized Provinces like Assam, Vishnu-worship has become practically the religion of the people

The Car Festival of Jagannáth is perhaps the most typical J

<sup>&</sup>lt;sup>1</sup> See Hunter's Statistical Account of Bengal, vol 1 pp 73-75 (TWENTY FOUR PARGANAS), vol 11 pp 53-55 (NADIVA)

<sup>&</sup>lt;sup>2</sup> See The Imperial Gazetteer of India, article CENIRAL PROVINCES

<sup>&</sup>lt;sup>3</sup> See *The Imperial Gazetteer of India*, articles AMRITSAR and PUNJAB For the theological aspects of the Sikhs, see Wilson's *Keligion of the Hindus*, vol 1 pp 267-275 (ed 1862)

<sup>4</sup> H H Wilson's Religion of the Hindus, vol 1 p 269

ceremony of the Vishnuite faith Jagannath, literally 'The Lord of the World,' represents, with unmistakeable clearness, that coalition of Bráhman and Buddhist doctrines which forms the basis of Vishnu-worship. In his temple are three rude images, unconsciously representing the Brahmanical triad His Car Festival is probably a once conscious reproduction of the Tooth Festival of the Buddhists, although its original significance has dropped out of sight. The Chinese pilgrim Fa-Hian gives in account of the yearly procession of Buddha's Sacred Tooth from its chapel to a shrine some way off, and of its return after a stay there. This was in the 5th century A.D., but the account applies so exactly to the Car Festival at the present day, that Fergusson pronounces the latter to be 'merely a copy'.

A similar festival is still celebrated with great rejoicing in Japan. As in the Indian procession of Jagannáth, the Japanese use three cars, 3 and Buddha sits in his temple, together with two other figures, like the Jagannath triad of Orissa. 3 It is needless to add, that while Jagannath is historically of Buddhist or composite origin, he is to his true believers the one supreme 'Lord of the World.'

The calumnies in which some English writers have indulged with regard to Jagannath, are exposed in Hunter's work on Orissa. That work carefully examined the whole evidence on the subject, from 1580, when Abul Fazl wrote, through a long series of trave'lers, down to the police reports of 1870. It came to the conclusion which H. H. Wilson had arrived at from quite different sources, that self-immolation was entirely opposed to the worsh p of Jagannath, and that the deaths at the Car Festival were almost always accidental. In a closely-packed, eager throng of a hundred thousan I men and women at Puri, numbers of them unaccustomed to exposure or hard labour, and all of them tugging and straining to the utmost at the car, under a blazing sun, deaths must occasionally occur

There were also isolated instances of pilgrims throwing themselves under the wheels in a frenzy of religious excitement. At one time, several unhappy people were killed or injured every year, but they were almost invariably cases

<sup>1</sup> From the chapel at Anuradhapura to Mehentele

<sup>&</sup>lt;sup>2</sup> History of Architecture, vol 11 p 590 (ed 1867)

<sup>&</sup>lt;sup>3</sup> See, among many interesting notices by recent travellers, Miss Bird's Unbeaten Tracks in Japan, vol 1 pp 111, 115, etc (ed 1880)

<sup>4</sup> Hunter's Orssa, vol 1, particularly pp 306-308, also pp 132 136

<sup>&#</sup>x27;Namely, the descriptions of the Car I estival or Rath Jaira in the work of Krishna Das

of accidental trampling At an early period, indeed, the priests at Purí, probably by permitting a midnight sacrifice once a year within their precincts to the wife 1 of Siva, had fallen under suspicion of bloody rites 2 But such rites arose from the ambition of the priests to make Puri the sacred city of all worships and all sects The yearly midnight offerings to the Dread Goddess within Jagannáth's sacred precincts represent the efforts made from time to time towards a coalition of the Sivaite and Vishnuite worship, like the chakra or sacred disc of Vishnu which surmounts the pre-historic temple to Káli at Tamluk <sup>8</sup>

Such compromises had nothing to do with the worship of the His true Jagannáth A drop of blood even accidentally spilt in bloodless worship his presence pollutes the officiating priests, the people, and the consecrated food. The few suicides that occurred at the Car Festival were for the most part those of diseased and miserable objects, who took this means to put themselves out of pain 4 The official returns now place the facts beyond doubt. Nothing could be more opposed to Vishnu-worship than self-immolation Any death within the temple of Jagannath renders the place unclean The ritual suddenly stops, and the polluted offerings are hurried away from the sight of the offended god.

According to Chaitanya, the Orissa apostle of Jagunnáth, Evidence the destruction of the least of God's creatures is a sin about against the Creator Self-slaughter he would have regarded Jagannath with abhorrence The copious literature of his sect frequently describes the Car Festival, but makes no mention of self-sacrifice, and contains not a single passage which could be twisted into a sanction for it 5 Abul Fazl, the minister of Akbar, who conducted the survey of India for the Mughal Emperor, is silent about self-immolation to Jagannáth, although, from the context, it is almost certain that had he heard of the practice he would have mentioned it In 1870, the present author compiled an index to all accounts by travellers and others of self-immolation at the Car Festival, against from the 14th century downwards 6 It proved that such self slaughter

1 Bimalá, the 'Stainless One'

<sup>&</sup>lt;sup>2</sup> See statement from the Haft illim (1485-1527 AD) in Hunter's Orissa, vol 1 p 306

<sup>3</sup> See The Imperial Gazetteer, article TAMLUK

<sup>4</sup> See authorities quoted in Hunter's Orissa, vol 1 p 134, Stirling's account, Asiatic Researches, vol xv p 324, Calcutta Review, vol x p 235, Report of Statistical Commissioner to the Government of Bengal, 1868, part 11 p 8, Puri Police Reports, Lieut Laurie's Orusa, 1850

H H Wilson's Religion of the Hindus, vol 1 p 155 (ed 1862)

<sup>6</sup> Hunter's Orissa, vol 1 pp 305-308 VOL VI

suicides did at rare intervals occur, although they were opposed to the spirit of the worship

Tabels on Jagannath

An Indian procession means a vast multitude of excitable beings ready for any extravagance Among Indian processions, that of Jagannath to his country-house stands first, and the frenzied affrays of the Muharram might as fairly be assigned to the deliberate policy of the British Government, as the occasional suicides at the Car Festival may be charged against the god The travellers who tell the most sensational stones are the ones whose narratives prove that they went entirely by hearsay, or who could not themselves have seen the Car Festival at Purí The number of deaths, whether voluntary or accidental, as registered by the dispassionate candour of English officials, has always been insignificant, indeed far fewer than those incident to the party processions of the Musalmans, and under improved police His gentle arrangements, they have practically ceased. So far from encouraging religious suicides, the gentle doctrines of Jagannath tended to check the once common custom of widow burning I ven before the Government put a stop to sati in 1829, our officials observed its comparative infrequency at Puri Widowburning was discountenanced by the Vishnuite reformers, and is stigmatized by a celebrated disciple as 'the fruitless union

doctrine-

I he reli\_i ou- nerns of Hindu nım

of beauty with a corpse'

such as the dread Kalı

The worship of Sixa and Vishnu operates as a religious bond among the Hindus in the same way as caste supplies the basis of their social organization Theoretically, the Hindu religion starts from the Veda, and acknowledges its divine authority. But, practically, we have seen that Hinduism takes its origin from many sources. Vishnu worship and Swatte rites represent the two most popular combinations of these various elements. The highly-cultivated Brahman is a pure theist, the less cultivated worships the divinity under some chosen form, ishta derata. The conventional Brahman, especially in the south, takes as his chosen deity, Siva in his deep philosophical significance, with the phallic linga as his The middle classes and the mercantile community adore some incarnation of Vishnu The low eastes propitiate Siva the Destroyer, or rather one of his female manifestations,

'chosen god, inte der ata

The

Practical Lindus

But every Hindu of education allows that his special object faith of the of homage is merely his ishta devata, or own chosen form under which to adore the Deity, PARAM ISWARA He admits

that there is ample scope for adoring God under other Its toler manifestations, or in other shapes Unless a new sect takes ance the initiative, by rejecting caste or questioning the authority of the Veda, the Hindu is slow to dispute the orthodoxy of the movement Even the founder of the Brahma Samál, or modern theistic church of Bengal, lived and died a Hindu 1 The Indian vernacular press cordially acknowledges the ments of distinguished Christian teachers, like Dr Duff of Calcutta, or Dr Wilson of Bombay At first, indeed, our missionaries, in their outburst of proselytizing zeal, spoke disrespectfully of Hinduism, and stirred up some natural resentment as they more fully realized the problems involved in conversion, they moderated their tone, and now live on friendly terms with the Brahmans and religious natives

An orthodox Hindu paper, which had been filling its Hindu columns with a vigorous polemic entitled 'Christianity fairness to Destroyed,' no sooner heard of the death of the late Mr tianity Sherring, than it published a eulogium on that devoted missionary It dwelt on 'his learning, affability, solidity, piety, benevolence, and business capacity' The editor, while a stout defender of his hereditary faith, regretted that 'so little of Mr Sherring's teaching had fallen to his lot '2 The Hindus are among the most tolerant religionists in the world

Of the three members of the Hindu Iriad, the first person, Modern Brahma, has now but a few scattered handfuls of followers, Hindu the second person, Vishnu, supplies a worship for the middle Triad classes, around the third person, Siva, in his twofold aspects, has grown up that mixture of philosophical symbolism with propitiatory rites professed by the highest and by the lowest castes But the educated Hindu willingly recognises that, beyond and above his chosen Deity of the Triad, or his favourite incarnation, or his village fctish, or his household sálagrám, dwells the PARAM ESWARA, the One First Cause, The One whom the eye has not seen, and whom the mind cannot God, PARAM conceive, but who may be worshipped in any one of the forms ESWARA in which he manifests his power to men

<sup>1</sup> The best short account of this deeply interesting movement, and of its first leader Rammohan Roy, will be found under the title of Indian Theistic Reformers, by Professor Monier Williams, in the Journal of the Royal Asiatic Society, Jan 1881, vol xiii See also his Modern India (Tribner, 1879), and Miss Collet's Biahmo Year Book (Williams & Norgate, annually)

\* The Kavi bachan Sudha, quoted in the Chronicle of the London Misstonary Society for November 1880, p 792

Recapitu

(1) Chus tianity,

lation Three Western influences.

The foregoing chapters indicate how, out of the early Aryan and non-Arvan races of India, as modified by Greek and Scythic invasions, the Hindu population and the Hindu religion were built up We shall next consider three series of influences which, within historic times, have been brought to bear, by nations from the West, upon the composite people thus formed The first set of these influences is represented by the early Christian Church of India, a Church which had its origin in a period long anterior to the mediæval Hinduism of the 9th century, and which is numerously represented by (2) Islam, the Syrian Christians of Malabar in our own day foreign influence brought to bear upon India from the West

consisted of the Muhammadan invasions, which eventually 31 Brush created the Mughal Empire. The third influence is repre-Kile sented by the European settlements, which culminated in the British Rule

## CHAPTER IX

## CHRISTIANITY IN INDIA (area 100 TO 1881 AD).

CHRISTIANITY now forms the faith of over two millions of Christian the Indian population. Coeval with Buddhism during the try coeval with last nine centuries of its Indian history, the teaching of Buddhism Christ has, after the lapse of another nine hundred years, for 900 more than twelve times more followers than the teaching of Buddha upon the Indian continent. Adding Burma, where the doctrines of Gautama still remain the creed of the people, there are over two millions of Christians to under three and a half millions of Buddhists, or to four millions of Buddhists and Jains. Christianity, while a very old religion in India, is also one of the most active at the present day. The Census of 1881 disclosed that the Christians in British and Feudatory India had increased by more than one fifth since 1872, and this increase, while partly the result of more perfect enumeration, represents to a large extent a real growth

The origin of Christianity in India is obscure Early Origin tradition, accepted popularly by Catholics, and more doubtfully of Christianity in by Protestants, connects it with St. Thomas the Apostle, India. who is said to have preached in Southern India, on the Malabar and Coromandel coasts, to have founded several The churches, and finally, to have been martyred at the Little orthodox fradition. Mount, near Madras, in 68 a.d. The Catholic tradition narrates further, that a persecution arose not long after, in which all the priests perished, that many years later, the Patriarch of Babylon, while still in communion with Rome, heard of the desolate state of the Indian Church, and sent forth bishops who revived its faith, that about 486 a.d., Nestorianism spread from Babylon into Malabar

To orthodoxy this tradition has a twofold value — It assigns Value an apostolic origin to the Christianity of India, and it explains of the tradition iway the fact that Indian Christianity, when it emerges into history, formed a branch of the unorthodox Nestorian Church Modern criticism has questioned the evidence for the evangelistic labours of the Doubting Apostle in Southern India. It

has brought to light the careers of two later missionaries, both bearing the name of Thomas, to whom, at widely separated dates, the honour of converting Southern India is assigned Gibbon dismisses the question of their respective claims in a convenient triplet — The Indian missionary St. I homas an Apostle, a Manichæan, or an Armenian merchant '1

Syrian Christians of India

This method of treatment scarcely satisfies the present century and the Strustical Survey of India has thrown fresh light on the Syrian Christians of the Southern Peninsula. At this day they number 304 410,2 or more than double the number of Native Protestants in India in 1861. Indeed, until within the past ten years, the remnants of the ancient Syrian Church had still a larger native following in India than all the Protestant sects put together. It would be unsuitable to dismiss so uncient and so numerous a body without some attempt to trace their history. That history forms the longest continuous narrative of any religious sect in India except the Juns.

Their numbers and antiques The Syrian Church of Malabar had its origin in the period when Buddhism was still triumphant, it witnessed the birth of the Hinduism which supersided the doctrine and national polity of Buddha it saw the arrival of the Muhammadans who ousted the Hindu dynasties, it suffered cruelly from the Roman inquisitors of the Portuguese, but it has survived its persecutors, and has formed a subject of interest to Anglican inquirers during the past eighty years 4

The three Lagends of St Thomas I he three legends of St. I homas, the missionary of Southern India, may be summarized as follows. According to the Chaldæan Breviary and certain I athers of the Catholic Church

<sup>1</sup> Decline and Fall of the Roman Emfire equation edition, 1788, vel is p 599, footnote 122

the whole as 'Syrians, without discriminating between Jicolites and Syrian Cathonics. A statement kindly supplied to the author by the Vicar Apostolic of Verapo 1 returns the Syrian Catholics within his jurisdiction.

over 200,000, and the Jacobites at about 100,000. The latter are criefly under the jurisdiction of the Roman vicars apostolic of Verypolicing Quilon, but are still distinguished as 'Catholics of the Syran rite'

1 See Protestant Missions in India, Burma, and Collon, Satisfical India, 1881, drawn up under the authority of the Calcutt Missionary Conference. This valuable compilation returns 138 7,1 Native Protestant Christians in 1861, and 224,258 in 1871, in India, exclusive of Burma

\*From the time of Claudius Buchman and Bishop Heber downwards a Arasic Researches, vol. vii., "Account of St. Thome Christians on the coast of Malabar," by Mr. Wrede, Buchanan's Christian Accounts in Ara, 4th ed. (1811), pp. 100, 145, Heler's Journal, vol. ii., Lishop Middleton's Iste of Le Bas, chapters ix and (1831), Hough a Hist of Criticiantly in India, 5 vols. (1839-60)

St 7 homas the Apostle converted many countries of Asia, and 52 to 68 found a martyr's death in India. The meagre tradition of the A D (?) early Church was expanded by the Catholic writers of the six-Maria makes the Apostle commence his work in Mesopotamia, First and includes Bactria, Central Asia, China, 'the States of the Legend St Thomas, Great Mogul,' Siam, Germany, Brazil, and Ethiopia, in the the circle of his missionary labours The apostolic traveller then Apostle sailed east again to India, converting the island of Socotra on (68 A D) the way, and after preaching in Malabar, ended his labours on the Coromandel coast 1 The final development of the tradition fills in the details of his death. It would appear that on the 21st December 68 AD, at Mailapur, a suburb of Madras, the Brahmans stirred up a tumult against the Apostle, who, after being stoned by the crowd, was finally thrust through with a spear upon the spot now known as St Thomas' Mount

The second legend assigns the conversion of India to Second Thomas the Manichæan, or disciple of Manes, towards the Legend I homas end of the third century Another legend ascribes the honour the Mani to an Armenian merchant, Thomas Cana, in the eighth century chean (277 The story relates that Mar I homas, the Armenian, settled in AD) Malabar for purposes of trade, married two Indian ladies, and Third grew into power with the native princes He found that such Legend Thomas Christians as existed before his time had been driven by the Ar persecution from the coast into the hill country Mar Thomas menian secured for them the privilege of worshipping according to (780 1 1) their faith, led them back to the fertile coast of Malabar, and became their archbishop. On his death, his memory received the gradual and spontaneous honours of canonization by the Christian communities for whom he had laboured and his name became identified with that of the Apostle

Whatever may be the claims of the Armenian I homas as the Thethree re-builder of the Church in Southern India, he was certainly Legends examined, not its founder Apart from the evidence of Patristic literature, there is abundant local proof that Christianity flourished in Southern India long before the eighth century. In the sixth the third, century, while Buddhism was still at the height of its power, Kalyán, on the Bombay coast, was the seat of a Christian bishop from Persia 2

<sup>1</sup> The Book of Ser Marco Polo the I en tran Colonel Yule's second edition, vol 11 p 343, note 4 (1875)

<sup>2</sup> Gazetteer of the bombas Presidency, vol vin part 1, Thana District, pp 66, 200, etc It is not necessary to dispute whether the seat of this bishopric was the modern Kalyan or Quilon (Coilam), as the coast from Bombay southwards to Quilon bore indefinitely the name of Caliana.

the second
legend,

The claims of Thomas the Manichæan have the European support of the Church historians, La Croze, Tillemont, and others The local testimony of a cross dug up near Madras in 1547, bearing an inscription in the Pehlvi tongue, has also been urged in his favour. The inscription is probably of the seventh or eighth century AD, and, although somewhat variously deciphered, bears witness to the sufferings of Christ?

and the

For the claims of St Thomas the Apostle, a longer and more ancient series of authorities are cited. The apocryphal history of St Thomas, by Abdias, dating perhaps from the end of the first century, narrates that a certain Indian king, Gondaphorus, sent a merchant called Abban to Jesus, to seek a skilful architect to build him a palace. The story continues that the Lord sold Thomas to him as a slave expert in that art. The Apostle converted King Gondaphorus, and then journeved on to another country of India, under King Meodeus, where he

1 Histoire du Christianisme des Inlie, 2 vol. 12mo (The Hague, 1758)

<sup>2</sup> Professor Haug reads it thus 'Whoever believes in the Messiah, and in God above, and also in the Holy Ghost, is in the grice of Him who bore the pain of the cross' Dr Burnell deciphers it more authdently—'In punishment [?] by the cross [was] the suffering of this [one] [He] who is the true Christ and God above, and Guide for ever pure.' Yule's Marci Polo, 2nd et , p. 345, vol. in , also p. 359 where the cross is figured.

<sup>3</sup> This legend forms the theme of the Hymnus in Fe to Santi Thomac Apostoli and Vesterum, in the Mozarabic Breviary, edited by Cardinal Lorenzana in 1775. Its twenty one veises are given as an appendix in Dr Kennet's Madias monograph. Three stanzas will here suffice.—

' Nuncius venit de Indis Quaerere artificem Architectum construcre Regium palatium In foro deambulabat Cunctorum venalium

Habeo servum fidelem,
Locutus est Dominus,
Lt exquiiis talem, aptum
Esse hunc artificem
Abbanes videns, et gaudens,
Suscepit Apostolum?

The hymn assigns the death of the Apostle to the priest of a sun temple which had been overthrown by St. Thomas, --

'Tune sacerdos idolorum
Faribundus astitit,
Gladio transverberavit
Sanctum Christi martyrem
Glorioso passionis
Laureatum sanguine.'

was slain by lances 1 The existence of a King Gondaphorus has been established by coins, which would place him in the last century BC, or within the first half of the first century of our era<sup>2</sup> But, apart from difficulties of chronology, it is clear that the Gondaphorus of the coins was an Indo-Scythic monarch, reigning in regions which had no connection with Malabar His coins are still found in numbers in Afghánistán and the Punjab, especially from Pesháwar to Ludhiana was essentially a Punjab potentate

The mention of St Thomas the Apostle in connection with Wide India by the Fathers, and in the Offices of the Church, does meaning of India, not bring him nearer to Malabar, or to the supposed site of his martyrdom at Madras For the term 'India,' at the period to which these authorities belong, referred to the countries beyond Persia, including Afghanistán and the basins of the Upper Oxus, Indus, and Ganges, rather than to the southern half of the peninsula. In the early accounts of the labours of in the St Thomas, the vague term India is almost always associated Fathers, with Persia, Media, or Bactria 3 Nor does the appellation of St I homas as the Apostle of India in the Commemorations of the Church, help to identify him with the St Thomas who preached on the Malabar and Coromandel coasts only does the indeterminate character of the word still adhere to their use of 'India,' but the area assigned to the Apostle's labours is so wide as to deprive them of value for the purpose of local identification Thus, the Chaldean Breviary of the Malabar Church itself states that 'by St Thomas were the

<sup>&</sup>lt;sup>1</sup> Colonel Yule's Marco Folo, second edition, vol in p 243 in an interesting monograph entitled St Thomas, the Apostle of India, p 19 (Madias, 1882), says - 'The history of Abdias was published for the first time by Wolfgang Lazius, under the title of Abdia Babylonia, Episcofi et Apostolorum Discipuli, de Historia certaminis Afostolici, hori decem Julio Africano Interprete basilia, 1532

For the various dates, see Colonel Yule's Marco Polo, second edition, vol 11 p 343 Colonel Yule's Cathan deals with the Chinese and Central Asian aspects of the legend of St. Thomas (2 vols. 1866)

<sup>3</sup> Thus the Paschal Chronick of Bishop Dorotheus (born 1 D 254) says 'The Apostle Thomas, after having preached the gospel to the Parthians, Medes, Persians, Germanians [an agricultural people of Persia mentioned by Herodotus, 1 125], Bactrians, and Magi, suffered martirdom at Calamina, a town of India' Hippolytus, Bishop of Portus (cuea 220 A.D.), assigns to St. I homas, Parthia, Media, Persia, Hercania, the Bactri, the Mardi, and, while ascribing the conversion of India to St Bartholomew, mentions Calamina, a city of India, as the place of St Thomas' martyr-The Metropolitan Johannes, who attended the Council of Nicva in 325, subscribed as Bishop of 'India Maxima and Persia.' Dr Kennet's monograph (Madras, 1882). Hough, 1 pp 30 to 116

and Church Offices

Chinese and the Ethiopians converted to the Truth,' while one of its anthems proclaims 'The Hindus, the Chinese, the Persians, and all the people of the Isles of the Sea, they who dwell in Syria and Armenia, in Javan and Roumania, call Thomas to remembrance, and adore Thy Name, O Thou our Redeemer!

First glimpse at Indian 111ta 190 1 1)

The

Koman

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fleet from

Candid inquiry must therefore decline to accept the connection of St Thomas with the 'India' of the carly Church Christians, as proof of the Apostle's identity with Thomas, the missionary to Malabar Nevertheless, there is evidence to indicate that (hristianity had reached Malabar before the end of the second century AD, and nearly a hundred years previous to the supposed labours of Thomas the Manichæan (cuca 277 AD) the 2nd century a Roman merchant fleet of one hundred sail steered regularly from Myos Hormus on the Red Sea, to Arabia, Ceylon, and Malabar It found an ancient Jewish colony, the remnants of which still remain to this day as the Beni-Israels,1 upon the Bombay coast Whether these Jews emigrated to India at the time of the Dispersion, or at a later period, their settlements probably date from before the second century of our era

Icu octtle nen s in ancier Malat ar

The Red Sea fleet from Myos Hormus, which traded with this Jewish settlement in India, must in all iikelihood have brought with it Tewish merchants and others acquainted with the new religion of Christ which, starting from Palestine, had penetrated throughout the Roman world Part of the fleet, moreover, touched at Aden and the Persian Gulf, themselves early seats of Christianity Indeed, after the direct sci-course to Malabar by the trade winds was known, the main navigation to India for some time hugged the \siatic coast Christian merchants from that coast, both of Jewish and other race, would in the natural course of trade have reached Malabar within the second century AD2 The Buddhist polity then supreme in Southern India was favourable to the reception of a faith whose moral characteristics were humanity and self-Earlier Jewish settlers had already familiarized the sacrifice native mind with the existence of an ancient and imposing

<sup>1</sup> For their present numbers and condition, see the hombay caretteer, by Mr J M Campbell, ILD, of the Bombay Civil Service, vol x1 pp 85 and 421, vol xiii p 273

<sup>-</sup> The Roman trade with the southern coast of India probably dates from, or before, the Apostolic period. Of 522 silver denarii found near Combatore in 1842, no fewer than 135 were come of Augustus, and 378 of Liberius Another find near Calicut about 1850 contained in aureus of Augu tos with several hundred coins, none later than the Emperor Nero

religion in Palestine When that religion was presented in its new and more attractive form of Christianity, no miraculous intervention was probably required to commend it to the tolerant Buddhist princes of Southern India

About 190 AD, rumours, apparently brought back by the Malabar Christians, Red Sea fleet, of a Christian community on the Malabar coast, care 190 fired the zeal of Pantænus of Alexandria Pantænus, in his A.D earlier years a Stoic philosopher, was then head of the cele-Pantænus brated school which formed one of the glories of his city He started for India, and although it has been questioned whether he reached India Proper, the evidence seems in favour of his having done so He 'found his own arrival anticipated by some who were acquainted with the Gospel of Matthew, to whom Bartholomew, one of the apostles, had preached, and had left them the same Gospel in the Hebrew, which also was preserved until this time'i His mission may be placed at the end of the 2nd century Early in the 3rd century, St Hippoly Hippolytus, Bishop of Portus (arc 220 AD), also assigns the 220 AD conversion of India to the Apostle Bartholomew 10 Thomas he ascribes Persia and the countries of Central Asia, although he mentions Calamina, a city of India, as the place where I homas suffered death

Indeed, the evidence of the early Christian writers, so far as it goes, tends to connect St. I homas with the India of the ancient world,-that is to say, with Persia and Afghanistan,and St Bartholomew with the Christian settlements on the Walabar coast Cosmos Indicopleustes writes of a Christian Cosmos Church in Ceylon, and on the Callian or Malabar seaboard Indico pleustes, (circ 547 AD) But he makes no mention of its foundation inc 547 by St Thomas, which, as an Alexandrian monk, he would have 4 D been almost sure to do had he heard any local tradition of He states that the Malabar Bishop was the circumstance consecrated in Persia, from which we may infer that the Christians of Southern India had already been brought within the Nestorian fold I here is but slight evidence for fixing upon the Malabar coast as the seat of the orthodox Bishop I rumentius, sent forth by Athanisius to India and the East, arc 355 AD

The truth is, that the Christians of Southern India belonged Nestorian from their first clear emergence into history to the Syrian Asia rite If, as seems probable Christianity was first brought to Malabar by the merchant fleet from the Persian Gulf, or the

1 Dr Kennet, quoting Fuschus, in his monograph on St Ihomas, the Apostle of India, p. 9 (Midras, 1882)

Asiatic coast of the Arabian Sea, the Malabar Christians would follow the Asiatic forms of faith When, therefore, in the 5th century, Nestorianism, driven forth from Europe and Africa, conquered the allegiance of Asia, the Church of Southern India would naturally accept the Nestorian doctrine

Side by side with Buddhism for 1000 years

It should be remembered that during the thousand years when Christianity flourished in Asia, from the 5th to the 15th century, it was the Christianity of Nestorius The Jacobite sect dwelt in the midst of the Nestorians, and for nearly a thousand years, the Christianity of these types, together with Buddhism, formed the two intelligent religions of Central Asia. How for Buddhism and Christianity mutually influenced each other's doctrine and ritual still remains a complex problem Christianity in western Central Asia appears to have offered a longer resistance than Buddhism to the advancing avalanche of Islam, and in the countries to the west of I ibet it survived its Buddhist rival 'Under the reign of the Caliphs,' says Gibbon, 'the Nestorian Church was diffused from China to Jerusalem and Cyprus, and their numbers, with those of the Jacobites, were computed to surpass the Greek and Latin communions '1

The marvellous history of the Christian Tartar potentiate Prester John, king, warrior, and priest, is a mediæval legend based on the ascendancy of Christianity in some of the Central Asian States <sup>2</sup> The travellers in Tartary and China, from the 12th to the 15th century, bear witness to the extensive survival, and once flourishing condition, of the Nestorian Church, and justify Pierre Bergeron's description of it as 'epindue par toute l'Asie'. The term Catholicos, which the Nestorians applied to their Patriach, and the Jacobites to their Metropolitan, survives in the languages of Central India. The mediæval travellers preserve it in various forms, <sup>4</sup> and the British Embassy to Yarkand, in 1873, still

Its wide littasion

<sup>1</sup> Decline and Fall of the Roman Emple, p. 598, vol. iv equationed 1788) Gibbon quotes his authorities for this statement in a footnote. The whole subject of early Christianity in Central Asia and China has been discussed with exhaustive learning in Colonel Yule's Cathay, and the Way Thither—Hakluyt Society, 2 vols. 1866

<sup>&</sup>lt;sup>2</sup> 'Voyage de Rubruquis en Tartarie,' chap aix, in the quarto volume of Voyages en Asse, published at the Hague in 1735 Guillaume de Kubruquis was an ambassador of Louis IX, sent to Tartary and China in 1253 AD Colonel Vule also gives the story of Prester John in Marco Polovol 1 pp 229-233 (ed. 1875)

<sup>3 &#</sup>x27;Traite des l'artures,' par l'ierre Beigeron, chap in in the Hague quarto of Voyages en Asie, above quoted (1735)

Inthalil, Jatolic, Jatolu, originally Gatualil

came upon a story of 'a poor and aged Jatlak, or Christian priest '1

Whether the Christians on the coast of Malabar were a direct 'Thomas offshoot of the Nestorian Church of Asia, or the result of an Christians, of Persia, earlier seedling dropped by St Thomas or St Bartholomew on their apostolic travels, it is certain that from their first appearance in local history, the Malabar Christians obeyed bishops from Persia of the Nestorian rite 2 By the 7th century, the Persian Church had adopted the name of Thomas Christians, and this title would in time be extended to all its branches, including that of Malabar The early legend of the and of Manichæan Thomas in the 3rd century, and the later labours India of the Armenian Thomas, the rebuilder of the Malabar Church. in the 8th, had endeared that name to the Christians of Southern India. In their isolation and ignorance, they confounded the three names, and concentrated their legends of the three Thomases in the person of the Apostle 3 Before the 14th century, they had completed the process by believing that St Thomas was Christ

The fitness of things soon required that the life and death Legend of the Apostle should be localized by the Southern Indian of St Thomas Church Patristic literature clearly declares that St Thomas localized, had suffered martyrdom at Calamina, probably in some country cast of Persia, or in Northern India itself. The tradition of the Church is equally distinct, that in 304 AD the remains of the Apostle were transferred to Edessa in Mesopotamia 4 The attempt to localize the death of St Thomas on the south-in spite of western coast of India started, therefore, under disadvantages difficulties, A suitable site was, however, found at the Mount near Madras, one of the many hill shrines of ancient India which have formed a joint resort of religious persons of diverse faiths,-Buddhist, Muhammadan, and Hindu (ante, p 203)

Marco Polo, the first European traveller who has left an I, th cen account of the place, gives the legend in its undeveloped form of the

legend

<sup>1</sup> Dr Bellew's 'History of Kishgar,' in the Official Report of Sir Douglas Forsyth's Mission, p 127 (Quarto, Foreign Office Piess, Cal cutta, 1875)

<sup>2</sup> Mr Campbell's Bombas Ga etter, Thana District, chap in (Bombay, 1882)

<sup>3</sup> The Jacobites, or followers of Jacobus Baiadaeus, prefer in the same way to deduce their name and pedigree from the Apostle James Gibbon, 1v 603, footnote (ed 1788)

<sup>4</sup> For the authorities, see Dr Kennet's Madras monograph, St Thomas, the Apostle of India (1882), and Colonel Yule's critical note, Marco Polo, vol 11 p 342 (2nd edition, 1875)

in the 13th century The Apostle had, it seems, been acci-

dentally killed outside his hermitage by a fowler, who, 'not seeing the saint, let fly an arrow at one of the peacocks this arrow struck the holy man in the right side, so that he died of the wound, sweetly addressing himself to his Creator '1 Miracles were wrought at the place, and conflicting creeds claimed the hermit as their own Both Christians and Saracens however, greatly frequent the pilgrimage,' says Marco Polo truthfully, although evidently a little puzzled 2 'For the Saracens also do hold the Saint in great reverence, and say that he was one of their own Saracens, and a great prophet' Not only the Muhammadans and Christians, but also the Hindus seem to have felt the religious attractions of the spot About thirty years after Marco Polo, the Church itself was, according to Odoric, filled with idols 3. Two centuries later Joseph of Cranginore, the Milabar Christian, still testifies to the joint worship of the Christian and the heathen at St The Syrian bishops sent to India in 1504 Thomas' Mount heard 'that the Church had begun to be occupied by some But Barbosa, a few years later, found it half Christian people in ruins, and in charge of a Muhammadan fakir, who kept a lamp burnin, '4

at the

Mixed worship

The legen 1 a developed

ly the Lort guese Portuguese zeal, in its first fervours of Indian evangelization, felt keenly the want of a sustaining local hagiology. Saint Catherine had, it deed, visibly delivered (soa into their hands and a parish church, afterwards the cathedril, was dedicated to her in 1512. Ten years later the viceroy Duarte Menezes became ambitious of enriching his capital with the bones of an apostle. A mission from Goa despatched to the Coromandel coast in 1522, proved itself ignorant of, or superior to, the well-established legend of the translation of the Saint's remains to Edessa in 394 AD, and found his sacred relies at the ancient hill shrine near Madras, side by side with those of a king whom he had converted to the futh. They were brought with pomp to Goa, the Portuguese capital of India, and there

Brighter days, however, now dawned for the Madras legend

Kelies at Gra

Final form The finding of the Pehlvi cross, mentioned on a previous of the legen! page, at St. I homas' Mount in 1547, gave a fresh colouring to

they lie in the Church of St. I homas to this day?

<sup>1</sup> Colonel Yule s Marco Polo (2rd edition, 1875), vol 11 p 340 - Idem, 11 pp 337-338 

<sup>1</sup> Idem, 11 pp 344. 

<sup>4</sup> Ibro

<sup>•</sup> Ital Colonel Yule - Cathay (2 vols 1866) should also be referred to be stadents of the legend of St. Thomas, and his alleged labours in Asia and India.

the legend So far as its inscription goes, it points to a Persian. and probably to a Manichæan origin But at the period when it was dug up, no one in Madras could decipher its Pehlvi characters A Bráhman impostor, knowing that there was a local demand for martyrs, accordingly came forward with a fictitious interpretation The simple story of Thomas' accidental death from a stray arrow, had before this grown into a cruel martyrdom by stoning and a lance thrust, with each spot in the tragedy fixed at the Greater and Lesser Mount near The Bráhman pretended to supply a confirmation of the legend from the inscription on the cross-a confirmation which continued to be accepted until Dr Burnell and Professor Haug published their decipherments in our own day 'In the 16th and 17th century,' says Colonel Yule, 'Roman Catholic ecclesiastical story-tellers seem to have striven in rivalry who should most recklessly expand the travels of the Apostle'

The lying interpretation of the Brahman, and the visible King relics in the church at Goa, seem to have influenced the Alfred's Embassy, popular imagination more powerfully than the clear tradition of the early Church regarding the translation of the Apostle's relics to Edessa Our own King Alfred has been pressed into the service of St. I homas of Madras 'This year,' 883 AD, says the Anglo Saxon Chronicle, 'Sighelm and Athelstane carried to Rome the alms which the king had vowed to send thither, and also to India to St Thomas and to St Bartholomew'1 Cubbon suspects 'that the English ambassadors collected their cargo and legend in Egypt'2 There is certainly no evidence to show that they ever visited the Coromandel coast, but to and much to indicate that the 'India' of Alfred was the India which shrine of the early Church, and far north west of the Madras exploits of the Apostle. The legend of St Thomas Mount has in our own century been illustrated by the eloquence and learning of bishops and divines of the Anglo Indian Church concludes Colonel Yule, 'I see that the authorities now ruling the Catholics at Madras are strong in disparagement of the special sanctity of the localities, and of the whole story connecting St. Thomas with Mail ipur,' the alleged scene of his martyrdom 3

<sup>1</sup> Hough, 1 p 104 (1839), Dr Kennet's Mudras monograph, St Thomas, the Apostle of India, pp 6, 7 (1882)

<sup>-</sup> Decline and Fall of the Koman Empire, vol iv p 599, footnote 123 (ed 1788), Hough, vol 1 pp 105-107

Colonel Yule's Marco Polo, n p 344 (cd 1875)

Troubles of the Ancient Indian Church

As a matter of history, the life of the Nestorian Church in India has been a troubled one A letter from the Patriarch Jesajabus to Simeon, Metropolitan of Persia, shows that before 600 AD, the Christians along the Indian coast were destitute of a regular ministry 1 In the 8th century, the Armenian friar Thomas found the Malabar Christians driven back into In the 14th century, Friar the recesses of the mountains Jordanus declared them to be Christians only in name, without baptism They even confounded St Thomas with A mixed worship, Christian, Muhammadan, and Hindu, went on at the old high place or joint hill shrine near Madras In some centuries, the Church in Southern India developed, like the Sikhs in the Punjab, into a military sovereignty In others, it dwindled away, its remnants lingering in the mountains and woods or adopting heathen rites family names of a forest tribe in Kinari now Hindus, bear witness to a time when they were Christians, and there were probably many similar reversions to paganism

The S
Thomas
Christians
a military
caste

The downfall of the Nestonan Church in India was due, however, neither to such reversions to paganism nor to any persecutions of native princes, but to the pressure of the Portuguese Inquisition, and the proselytizing energy of Rome Before the arrival of Vasco da Gama in 1408, the St. Thomas Christians had established their position as a powerful military caste in Malabar The Portuguese found them firmly organized under their spiritual leaders, bishops, archdetcons, and priests, who acted as their representatives in dealing with the Indian princes For long they had Christian kings and at a later period chiefs, of their own 4. In virtue of an ancient charter ascribed to Cherumal Perumal, Suzerain of Southern India in the ninth century AD, the Malabar Christians enjoyed all the rights of nobility. They even claimed precedence of the Nairs, who formed the heathen aristocracy The St. Thomas Christians

Assemant Bibliotheca, quoted by Bishop (allwell, Comparate e Grammar of the Dravidian Langua, es, p. 27, footnote (ed. 1875) Je-ajabus died 660 A D

<sup>&</sup>lt;sup>2</sup> Jordanus, quoted in Mr J M Campbell's Bom ray Guzetteer, vol xiii part i p 200 (ed 1882)

The Marathi Sidis For an interesting account of them, see Mr J M Campbell's Bombay Gazetteer, Kanara District, vol xv part 1 p 397 (ed 1883)

<sup>\*</sup> Hi torre du Christianisme des Inles, par M \ La Crore, vol 1 p 72, ii p 133, etc (2 vols 12mo, the Hague, 1758)

I dom, 1 p 67 For det 1/2, see The Syrian Church of Malatar, by I available Philipos, p 23, and footnote (Oxford, 1869) Local legend vinty places Cherumal Perumal and his grant as fai lanck as 345 A.D.

and the Nairs were, in fact, the most important military castes on the south-west coast. They supplied the bodyguard of the Powerful local kings, and the Christian caste was the first to learn the and reuse of gunpowder and fire-arms They thus became the matchlockmen of the Indian troops of Southern India, usually placed in the van, or around the person of the prince

The Portuguese, by a happy chance, landed on the very Portu Province of India in which Christianity was most firmly estab-guese lished, and in which Christians had for long formed a recog-their con nised and respected caste The proselytizing energy of the new-version to comers could not, however, rest satisfied with their good fortune That energy was vigorously directed both against the natives and the ancient Christian communities Indeed, the Nestorian heresy of the St Thomas Christians seemed to the fervour of the friars to be a direct call from heaven for interference by the orthodox Church The Portuguese established the Inquisition, as we shall presently see, at Goa in 1560 After various Portuguese attempts, strongly resisted by the St Thomas Christians, the latter were incorporated into the Catholic Church, by the labours of Alexis de Menezes, Archbishop of Goa, in 1500 The Synod held by him at Udayampura (or Diamper), near Cochin, in that year denounced Nestorius and his heresies, and put an end to the existence of the Indian Nestorian Church

No document could be more exhaustively complete than Synod of the Acts and Decrees of the Synod of Diamper, in its pro-Diamper, visions for bringing the Walabar Christians within the Roman fold 2 The sacred books of the St Thomas congregations, their missals, their consecrated oil and church ornaments, were publicly burned, and their religious nationality as a separate caste was abolished But when the firm hand of Archbishop Menezes was withdrawn, his parchment conversions began to lose their force Notwithstanding the watchfulness of the Goa Inquisition over the new converts, the Decrees of the Synod of Diamper fell into neglect,3 and the Malabar Christians chafed under a line of Jesuit prelates from 1601 to 1653

In 1653 they renounced their allegiance to their Jesuit

<sup>1</sup> For the military aspects of the Christian caste of 5t Thomas, see 1 a Croze (op cet ), 11 pp 128, 129, 130, 140, 155, etc The History of the Church of Malabar and Synod of Diamfer, by the learned Michael Geddes, Chancellor of the Cathedral Church of Sarum (London, 1694), an carlier and independent work, bears out this view

<sup>&</sup>lt;sup>2</sup> The Acts and Decrees of the Synod of Diamper (1 e Udayampura) occupy 346 pages of the Chancellor of Sarum's History of the Church of Malabar, pp 07-443 (ed 1694)

<sup>3</sup> La Croze, u p 193

and Con veisions

Reversions bishop A Carmelite mission was despatched from Rome in 1656 to restore order The vigorous measures of its head, 1653 1663 Joseph of St. Mary, brought back a section of the old Christian communities, and Joseph, having reported his success at Rome, returned to India as their bishop in 1661 the Protestant Dutch pressing the Portuguese hard on the Malabar coast, 1661-1663 But the old military caste of Malabar Christians rendered no assistance to their Catholic superiors, and remained tranquil spectators of the struggle, till the capture of Cochin by the Dutch brought about the rain of the Portuguese power in 1663

Malabar Chr s ians freed by the Duich, ence 1003.

The Malabar Christians, thus delivered from the temporal power of the Portuguese, re-asserted their spiritual independ-The Portuguese had compelled the native princes to persecute the old Christian communities, and by confiscations, imprisonments, and various forms of pressure, to drive the Indian Nestorians into reconciliation with Rome 1 Such a persecution of a long recognised caste, especially of a valued military caste, was as foreign to the tolerant spirit of Hinduism as it was repunnant to the policy of the Indian princes, and it has left a deep impression on the traditions of the south western The native Jacobite historian of the Church of Malabar rises to the righteous writh of an old Scottish coveninter in recounting the bribing of the poorer chiefs by the Portuguese and the killings, persecutions, and separations of the married clergy from their wives The new Dutch masters of the southern coast, after a short antagonism to the Carmelite prelate and the native bishop whom he left behind lapsed into indifference They allowed the Roman missionaries free scope, but put an end to the exercise of the temporal power in support of the Catholic bishou 2

refere a larohi e I solo si 1665

The chief spiritual weapon of conversion, a weapon dexterously used by the Portuguese Viceroys had been the interruption of the supply of Nestonan bishops from Persia This they effected by watching the ports along the west coast of India, and preventing the entrance of any Nestorian prelate The Syrian Church in Indichad therefore to struggle on under its archdeacon, with grave doubts disturbing the mind of its clergy and laits as to whether the archidiaconal consecration was sufficient for the ordination of its priests The overthrow of the Portuguese on the scaboard put an end to this long episcopal blockade. In 1665, the Patriarch of

<sup>1</sup> La ( 102c, 301 ii pp 169 176, 183, 189, 192 198, 203, etc I a Croze, vol 1 pp 204, 205

Antioch sent a bishop, Mar Gregory, to the orphaned Syrian Church of India But the new bishop belonged to the Jacobite instead of the Nestorian branch of the Asiatic Church Indian Nestorianism may therefore be said to have received its death blow from the Synod of Diamper in 1599

Since the arrival of Mar Gregory in 1665, the old Syrian Malabar Church of India has remained divided into two sects Pazhera kúttakár, or Old Church, owed its foundation to Arch-1665, bishop Menezes and the Synod of Diamper in 1509, and its reconciliation, after revolt, to the Carmelite bishop, Joseph of St. Mary, in 1656 It retains in its services the Syrian language (1) Syrian and in part the Syrian ritual But it acknowledges the Catholics, supremacy of the Pope, and his vicars apostolic 
Its members are now known as Catholics of the Syrian Rite, to distinguish them from the converts made direct from heathenism to the Latin Church by the Roman missionaries The other section of the Syrian Christians of Malabar is called the Putten kúttakár, or New Church It adheres to the Jacobite tenets introduced bites, by its first Jacobite bishop, Mar Gregory, in 1665

The Christians

The present Jacobites of Malabar condemn equally the Tenets of errors of Arius, Nestorius, and the bishops of Rome 1 They the Malabai hold that the Brend and Wine in the Eucharist become the Jacobites Real Body and Blood of Christ, and give communion in both kinds mixed together They pray for the dead, practise confession, make the sign of the cross, and observe fasts they reject the use of images, honour the Mother of Jesus and the Saints only as holy persons and friends of God, allow the consecration of a married layman or deacon to the office of priest, and deny the existence of purgatory Creed they follow the Council of Nicæa (325 AD) They believe in the Trinity, assert the One Nature and the One Person of Christ, and declare the procession of the Holy Ghost to be from the Father, instead of from the Father and the Son 2

The Syrian Catholics and Syrian Jacobites of Malabar main- Nesto tun their differences with a high degree of religious vitality at rinnism the present day I heir congregations keep themselves distinct Malaba from the Catholics of the Latin Rite converted direct from heathenism, and from the Protestant sects. No Nestorian Church is now known to exist in Malabar 3 The Syrian

<sup>1</sup> The Syrian Christians of Malabar, being a Catechism of their doctrine and ritual, by Edavalikel Philipos, Chorepiscopus and Cathanar (2 c priest) of the Great Church of Cottry in Travancore, pp 3, 4, 8 (Parker, 1869)

<sup>&</sup>lt;sup>2</sup> The above summary is condensed from the Catechism of Edavilike Philipos, of cit pp 9-13, 17, 19 3 Idem, p 29

Christians were returned in 1871 at about one-third of a million, but the Census officers omitted to distinguish between Catholic Syrian and Jacobites The Catholic Archbishop and Vicar-Apostolic of Verapoli, to whose kind assistance this chapter is indebted in many ways, estimates the Syrian Catholics at 200,000, and the Jacobites at 100,000 for all Southern India cannot, however, be ascertained until the next Census of 1801

Portu Luese mis sionaries.

Roman friars had visited India since the 13th century first regularly equipped Catholic mission, composed of Fran-1500 A D. ciscan brethren, arrived from Portugal in 1500 Their attacks on the native religions seemed part of the Portuguese policy of aggression on the Native States The pious Portuguese monks were popularly identified with the brutal Portuguese soldiery, whose cruelties have left so deep a stain on early European The military attempts of the Portuguese. enterprise in India with Poitu and their ill-treatment of the native princes and the native population, provoked unmerited hatred against the disinterested, if sometimes ill judged, zeal of the Portuguese missionaries

identified guese aggres -10ns

Native re prisals or persecu t ons

Native reprisals, which certain writers have dignified by the name of persecutions, occasionally took place in return for Portuguese atrocities But the punishments suffered by the friars were usually inflicted for disobedience to the native civil power, or for public attacks on native objects of veneration, such attacks as are provided for by the clauses in the Anglo-Indian Penal Code, which deal with words or signs calculated to wound the religious feelings of others. Attacks of this kind lead to tumults among an excitable population, and to serious breaches of the peace, often attended with bloodshed native princes, alarmed at the combined Portuguese assault on their territory and their religion, could not be expected to decide in such cases with the cold neutrality of an Anglo-Indian magistrate Lather Pedro de Covilham was killed in 1500

Slow , rigiess

For some time, indeed, missionary work was almost confined to the Portuguese settlements, a'though King Lmmanuel (1408-1521) and his son John III (1521-57) had much at heart the conversion of the Indians The first bishop in India was Duarte Nunez, a Dominican (1514-17), and John de Albuquerque, a Franciscan, was the first bishop of Goa (1530-With St Francis Xavier, who arrived in 1542, began the the Jesuit, labours of the Society of Jesus in the East, and the progress of

Varier and 53) 1542

> St. I rancis' name is associated with the Malabar coast, and with the maritime tracts of Madura and Southern Madras

Christianity became more rapid

He completed the conversion of the Paravars in Tinnevelli St Francis District 1 His relics repose in a silver shrine at Goa. 2 Xavier Punnaikáyal, in Tinnevelli, was the scene, in 1549, of the death of Father Antonio Criminale, the protomartyr of the Society of Jesus, and in the following year, several other lives were lost in preaching the gospel. Goa became an Archbishopric in 1577 In 1596 to 1599, the Archbishop of Goa, Alexis de Menezes, an Augustinian, succeeded in recon-Alexis de ciling the Indian Nestorians to Rome, and at the Synod of Menezes Diamper (Udayampura, near Cochin) in 1509, the affairs of the Indian Christians were settled The use of the Syrian rite was Syrian rite retained after it had been purged of its Nestorianism The reformed, but relater history of the Syrian Christians in Malabar has already tained, been traced

The Jesuit mission to the Madras coast dates from 1606, The and is associated with the names of Robert de Nobili (its Madra-founder, who died 1656), John de Britto (killed in Madura 1693), Beschi the great scholar (who died about 1746), and other illustrious Jesuits, chiefly Portuguese 3 They laboured in Madura, Trichinopoli, Tanjore, Tinnevelli, Salem, etc. The mission of the Karnatic, also a Jesuit mission, was French in its origin, and due in some measure to Louis XIV in 1700 Its centre was at Pondicherri

The early Jesuit missions are particularly interesting Their Good priests and monks became perfect Indians in all secular work done matters, dress, food, etc, and had equal success among all Jesuits castes, high and low. In the south of the peninsula they brought, as we have seen, the old Christian settlements of the Syrian rite into temporary communion with Rome, and converted large sections of the native population throughout extensive districts The Society of Jesus had also numerous although less important missions in the north of India During the 17th and 18th centuries, religious troubles and difficulties arose in Western India through the action of the missionaries in regard to caste observances troubled the Church The Portuguese king claimed, as against the Pope, to appoint the Archbishop of Goz, and the Dutch adventurers for a time persecuted the Catholics along the coast

But in the 16th century it seemed as if Christianity was destined to be established by Jesuit preachers throughout

<sup>1</sup> See article TINNEVEI LI DISTRICI, The Imperial Gazettees of India

<sup>2</sup> See article GOA, The Imperial Gasett er of Intil

<sup>\*</sup> See articles MADURA and TINNEVELLI, edem

a large part of India The literary activity of missionaries belonging to the Order was also very great. Their early efforts in the cause of education, and in printing books in the various languages, are remarkable. De Nobili and Beschi have been named. Fathers Arnauld and Calmette should not be forgotten

I etters
of the
Jesuits,
16th and
17th cen
turies

lesuit stations in India

But apart from works of scholarship, the early Indian Jesuits have left literary memorials of much interest and value Their letters, addressed to the General of the Order in Europe, afford a vivid glimpse into the state of India during the 16th and 17th centuries. One volume, which deals with the period ending in 1570, furnishes by way of preface a topographical guide to the Jesuit stations in the East. Separate sections are devoted to Goa, Cochin, Bassein, I hana, and other places in Western India including the island of Socotra, in which the Jesuit brethren still found remnants of the Christians of St. Thomas

Basis of Porta quese rule

The letters, as a whole, disclose at once the vitality and the weakness of the Portuguese position in the Fast. The I usitanian conquest of India had a deeper fascination, and appeared at the time to have a higher moral significance for Chr stendom than afterwards attached to our more hesitating and matter-of fact operations. Their progress formed a brilliant triumph of military ardour and religious zeal resolved not only to conquer India, but also to convert her Only by slow degrees were they compelled in secret to realize that they had entered on a task, the mignitude of which they nad not gauged, and the execution of which proved to be altogether beyond their strength All that chivalry and enthusiastic mety could effect, they accomplished. But they failed to fulfil either their own hopes, or the expectations which they had raised in the minds of their countrymen at home Their viceroys had to show to Europe results which they were not able to produce, and so they were fun to accept the shadow for the substance, and in their official despatches to represent appearances as realities. In their inditary narratives, every petty Rája or village chief who sent them a few pumpkins or mangoes, becomes a tributary Rev, conquered by their arms or constrained to submission by the terror of their name In their ecclesiastical epistles, the whole country is a land

(onque t and c m version

<sup>&</sup>lt;sup>1</sup> Rerum a Societate Je u in Orunte Gestarum Velunian, Colonia, Anno 1574. It purports to have been translated into I atm from the Spanish The author has to thank Mr. Einest Satow, of H.B.M.'s Japanese Legation, for a loan of this curious volume

flowing with milk and honey, and teeming with a population eager for sacramental rites

The swift downfall of the Portuguese power, based upon Parochial conquest and conversion, will be exhibited in a later chapter organization of But the Portuguese are the only European nation who have created, or left behind them, a Christian State polity in India guese Γο this day, their East India settlements are territorially arranged in parishes, and the triveller finds himself surrounded by churches and other ecclesiastical features of a Christian country, among the rice-fields and jungles of Goa and Damán I his parochial organization of Portuguese India was the direct result of the political system imposed on the vicerovs from Europe But, indirectly, it represents the method adopted by the Society of Iesus in its efforts at conversion The Iesuits worked to a large extent by means of industrial settlements Many of their stations consisted of regular agricultural communities, with lands and a local jurisdiction of their own Indeed, both in the town and country, conversion went hand in hand with attempts at improved husbandry, or with a training in some mechanical art

This combination of Christianity with organized labour may Thana, a best be understood from a description of two individual settle Jesuit ments 1 Fhána, a military agricultural station, and Cochin, 1550 AD a collegiate city and naval port Thána, says a Jesuit letterwriter in the middle of the 16th century, is a fortified town where the Brethren have a number of converts time a wrinkled and deformed old man came to them from distant parts, greatly desiring to be made a Christian He was accordingly placed before a picture of the Blessed Virgin, and, having sought to kiss the Child, was forthwith baptized died in peace and joy next morning. Many boys and girls were likewise bought from the barbarians for a few pence a piece These swelled the family of Christ, and were trained up in doctrine and handicrafts. During the day they plied their trades as shoemakers, tailors, weavers, and iron-workers, Christian on their return at evening to the College, they sang the craftsmen, catechism and litanies in alternate choirs. Others of them were employed in agriculture, and went forth to collect fruits or to work with the Christian cultivators in the fields

There was also a Christian village, the Hamlet of the

<sup>1</sup> The following details were chiefly condensed from the Rerum a Societate Jesu in Oriente Gestarum Volumen, already referred to This book is no longer in the author's possession, and as no copy is procurable in India, the pages cannot be cited nor the exact words verified

and culti

Trinity, 3000 paces off, upon temple lands bought up and consecrated by the Order The Society had, moreover, certain farms, yielding 300 pieces of gold 2 year. This money supported the widows and orphans, the sick, and catechumens while engaged in their studies. The poorer converts were encouraged in agriculture by a system of advances. Everything seemed to prosper in the hands of the Jesuit Brethren, and their very goats had kids by couplets and triplets every year. The husbandmen 'are all excellent cultivators and good men,' well skilled in the Mysteries, and constant in the practice of their futh, assembling daily together ad signum angelicae salutations. 'Even in the woods, boys and men are heard chanting the Ten Commandments in a loud voice from the tops of the palm-trees'

Je-uit ruial organiza tien

The management of the mission stations seems to have been Four or five Brothers of the Order regulated alike the secular and the spiritual affairs of each community of them was a surgeon, who cured ulcers, sores, and dangerous maladies The Christian village of the Trinity had, moreover, certain gardens which the inhabitants held in common, well irrigated and rich in times, figs, and medicinal fruits catechism was publicly rehearsed once on ordinary days, twice on hondays. They held frequent musical services, the youths chanting the psalms, robed in white. The I hana choristers, indeed, enjoyed such a reputation that they were invited to sing at the larger gatherings at Bassein, and were much employed at funerals, at which they chanted the 'Miscricordia' to the admiration alike of Christians and heathers their civil and secular duties in the town of I hana, and at the Christian village and farms, the Brethren of the Order visited a circle of outposis within a distance of thirty thousand paces. to the great gain of their countrymen, whom they strengthen in their faith, and of the natives (barbari), whom they re claim from their errors and superstitions to the religion of Christ'

Cochin, a co legiate city

The station of Thana discloses the regulated industry, spiritual and secular, which characterized the Jesuit settlements in India. Cochin may be taken to illustrate the educational labours of the Order and its general scheme of operations. The College of the Society, writes brother Hieronymus in 1570, has two grammar schools, attended by 260 pupils, who have made excellent progress both in their studies and in the practice of the Christian sacraments. They are all skilled in

<sup>1</sup> Letter to the General of the Order, dated Cochin, I chruary 1570

the tenets of the faith, many of them have learned the catechism, arranged in questions and answers, and are now teaching it to the heathen The rites of confession and communion are in constant use, and resorted to on saints' days by 300 or 400 persons An equal concourse takes place when Indulgences are promulgated, and on a late occasion, when the jubilee granted by the Pope in 1568 was celebrated, 'such was the importunity of those seeking confession, that our priests could not find a breathing space for rest from morning to night' At the College Church alone a thousand persons received the Eucharist, chiefly new communicants A wholesale restitution of fraudulent gains took place, with a general reconciliation of enemies, and a great quickening of the faith 'So vast was the concourse at this single church, without mentioning the other churches in the city, that we had from time to time to push out the throngs from the edifice into the courtyard, not without tears and lamentation on their part'

The College of the Order likewise ministered to the Portu-Jesuit guese fleet stationed off Cochin, and the writer relates, with College at perhaps pardonable exaggeration, the strict discipline which Cochin the Brethren maintained among both officers and men During the winter they had also collected a fund, and with it redeemed five Portuguese who, the year before, had fallen into captivity among 'the Moors' These men, on coming to offer up public thanksgiving in church, edified the worthy fathers by relating how the Christians still remaining in captivity continued firm in the Catholic futh, although sorely tormented incommodis ct cruciatibus They told how one youth, in particular, 'who had attended our school, on being tied to a tree and threatened by the Moors with bows and arrows, had bravely answered that he would give up his life rather than his faith' Upon which the Moors seem to have laid aside their lethal weapons, and let the lad off with a few kicks and cuffs. Another boy had at first apostatized, but his fellow-captives, foremost among them a nobleman of high station, threw themselves at his feet, and begged him to stand firm The boy burst into tears, and declared that he had been led astray by terror, but that he would now rather die than abandon his religion himself as good as his word, rushed in front of his persecutors, and openly proclaimed himself to be still a Christian Moors,' as usual, seem to have taken the affair with much good nature, and, after another little comedy of tying him to a tree and threatening to shoot him and cut his throat, let their young apostate go

Jesuit itineraries

'I come now,' continues Father Hieronymus, 'to the harvest of this year' He goes on to describe the work of itinerating, from which we gather that the King of Cochin was friendly rather than otherwise to the members of the Order and their converts, protecting them by letters patent, and even giving rise to hopes of his own conversion. No fewer than 220 natives were baptized in one day, and the Fither adduces, as a proof of their sincerity, the fact that they did not expect any material advantage from their conversion 'For neither do they look for a present of new clothes at their baptism, nor for anything else from us, excepting spiritual food They think themselves greatly honoured by the name of Christians, and labour to bring others to the truth' Among the converts the Nairs figure a good deal, and an acolyte of this race, notwithstanding that he was harassed by the 'older Christians' brought in other Nairs, by twos and threes, for baptism The worthy Father uses 'Nair' as the name of 'a certain military class,' and so touches on the actual position held by this tribe three hundred years ago

Conver

Conversion was not, however, always without its troubles The story of a young Moor, whose mother was a cruel woman, and buried him in the ground up to his mouth for turning a Christian, is told with houest pride His unkind parent likewise placed a huge stone round his head designing that he should die a slow and painful death. But the boy managed to peep through a cleft in the stone, and spied some travellers passing that way, whereupon, although he had formerly known nothing of I atin, he managed to shout out the two words, 'exopto Christum' On hearing this, the travellers dug up the lad and took him before the Governor, who, in an obliging manner, gave over the boy to the College to be builtied, and sent the mother to prison. The neophytes seem to have been spirited lads, and the Father narrates how about two thousand of them took part in the military games held when the fleet was lying off Cochin, and distinguished themselves so greatly with various sorts of darts and weapons, that 'they came next to the Portuguese soldiers'

I florts at royal con versions The College took advantage of the illness of the king during the course of the year to try to convert him, but his majesty, although civil and friendly, declined their well meaning efforts. They were more successful with two 'petty Rájas' (riguli) in the neighbourhood, who, 'being desirous of the Portuguese friendship,' professed an interest in spiritual matters on behalf of themselves and people. Three hundred, apparently of their

subjects, promised to get themselves baptized as soon as a church should be built 'But,' concludes the candid chronicler. 'as this particular people have a grievously bad reputation as liars, it is much to be prayed for that they will keep their word' From another instance of a royal conversion, it appears that the introduction of Christianity, with 'letters of privilege' to converts, was a favourite method among the weaker Rajas for securing a Portuguese alliance

The story of the Catholic missions thus graphically told by The the Rerum Gestarum Volumen of the 16th century, is con-Malabar Mission tinued for the 17th and 18th by the letters from the Jesuit 17th and Fathers in Malabar I hese letters have been edited by Le 18th cen Pere Bertrand in four volumes, which throw an important light, not only upon the progress of Christianity in India, but also upon the social and political state of the native kingdoms in which that progress was made 1. The keynote to the policy of the Society of Jesus, in its work of Indian evangelization, is given in the following words - 'The Christian religion cannot be regarded as naturalized in a country, until it is in a position to propagate its own priesthood '2

This was the secret of the wide and permanent success of the Catholic missions, it was also the source of their chief troubles 
For in founding Christianity on an indigenous Question basis, the Lathers had to accept the necessity of recognis-of caste ing indigenous customs and native prejudices in regard to caste The disputes which arose divided the Jesuit missionaries for many years, and had to be referred, not only to the General of the Order, but to the Pope himself The Question des Rites Malabares occupies many pages in Père Bertrand's volumes 3 In the end, a special class of native priests was assigned to the low castes, while an upper class ministered to the Indians of higher degree I he distinction was rigidly mainturned in the churches Pere Bertrand gives the plan of a

<sup>1</sup> M morres Historiques ver les Messions des er lies re quer qu'vol and ed , Paris, 1862) La Missim au Madure d'abs s'acs accuments ined's (3 vols , Pans, 1848, 1850, 1854) The first edition of the Umones Historiques (Puris, 1847) formed apparently an introduction to the three volumes of Letters which con titute Pere hertrand s I a Mession an Maaure The author takes this opportunity of acknowledging his obligations to the authorities of St Navier's College Calcutta, for the loan of I ere Bertrand's works, and for much kind assistance in his inquiries

<sup>2</sup> Condensed from Pere Beitrand, Missions, vol 1 p 1

<sup>3</sup> For example, Memoires Historiques, vol 1 pp 353 et seq. Indeed, this volume is largely devoted to the polemics of the question Also I a Mission an Madure, vol n pp 140 et aa vol n pp 404 to 496, and in many other places of Pere Bertrand's work

Malabar church as laid before the sovereign Pontiff in 1725, which shows a systematic demarcation between the high and low castes even during divine service. Whatever may have been lost of the primitive Christian equality by this system, it had the ment of being adpated to native habits of thought, and it was perhaps unavoidable in an Indian church which endeavoured to base itself upon an indigenous priesthood. The adoption of native terms by the Jesuit Fathers, such as guru, teacher, sum asi, hermit, etc., also led to embittered discussions

Letters from Malabai, 17th and 18th cen turies

Political ever s

ever s

Murcles

Martyr dom-

The letters disclose, however, other and more agreeable aspects of the early missions to India A few of them complain of the dangers and discomforts of missionary life in a tropical climate and among a suspicious people 2. But, as a rule, they are full of keen observation and triumphant faith them are regularly divided into two parts, the first being devoted to the secular history of the period, or 'Evenements politiques,' the second to the current afturs and progress of the mission. Others are of a topographical and statistical character Many of them record signs and wonders vouchsafed on behalf of their labours. A pigin woman, for example, who had been possessed of a devil from birth, is delivered from her tormentor by baptism, and enters into a state of 10y and peace. Another native law, who had determined to burn herself on her husband's funeral pile, and had resisted the counter entreatics of her family and the Village Head, miraculously renounced her it tention when sprinkled with ashes consecrated by the priest. Throughout, the letters breathe a desire for martyrdom and a spiritual evultation in sufferings endured for the cause

One very touching epistle is written by de Britto from his prison the day before his execution. 'I await death,' he writes to the Father Superior, 'and I await it with impatience. It has always been the object or my prayers. It forms to day the most precious reward of my labours and my sufferings's Another letter relates the punishment of I ather de Saa, several of whose teeth were knocked out by blows, so that he almost died under the pain (A D 1700). His tormentor was, however, miraculously punished and converted to the faith.

I the plan of the church is given at p 454 of Pere Ber'rand's Mission du Madure, vol iv ed 1854. The ments of the question are so fully discussed in that volume that it is unnecessary to reopen the question here.

<sup>&</sup>lt;sup>2</sup> For example, I ettre du Pore baltha.ar, dated Tanjore, 1653, op cit vol in pp 1 d vol

In Mi sin du Madure, vol su p 447 Letter dated 3rd February 1695 \*Vol sv pp 63 68

striking events take place in Malabar and Cochin But in other parts of India, also, there were triumphs and sufferings 'Even here,' writes Père Petit from Pondicherri, 'we are not altogether without some hope of martyrdom, the crown of apostleship'1 It is natural that such writers should regard as martyrs, their brethren who fell victims to popular tumults stirred up by their own preaching Penalties for sectarian affrays, or for insults to the native religions, such as would now be punished by the Indian Penal Code, figure as 'persecutions' The Salvationists have of late suffered several 'persecutions' of this sort from Anglo Indian magistrates

Nor are the literary labours of the Fathers without a fitting Literary record Bishop Caldwell lately expressed his regret that the labours of the Jesuits biography of Father Beschi, the Tamil scholar and poet, should yet be unwritten 2 But the defect is supplied, not only in an elaborate notice of Beschi's life and works, but also by Beschi's own letters to the General of the Order 3 Several epistles of de Nobili are of scarcely less interest in the annals of Indian Christianity

The arguments of the Catholic missionaries were enforced The Portu by the weapons of the secular power In 1560, the Portuguese guese In quisition, established the Inquisition at Goa, under the Dominican 1560 1812 Order At first the establishment was of a modest and tentative character the functionaries numbering only five, and the whole salaries amounting in 1565 to £71 a year 4 But by degrees it extended its operations, until in 1800 the functionaries numbered 47 The Goa Inquisition has formed the subject of much exaggerated rumour, and the narrative of one of its prisoners startled and shocked Europe during the seventeenth century. Dr Claudius Buchanan recalled public attention to the subject by his vividly coloured letters at the beginning of the nineteenth century ' The culmer narrative of Da Fonseca, derived from the archives of Goa, proves that the reality was sufficiently terrible No continuous statistics exist of the

<sup>1</sup> Vol 11 p 158

<sup>&</sup>quot; 4 Political and Gieral History of the Pistret of Tinne li, by Bi hop Caldwell (Madias (invernment Press, 1881), p. 259

d Pere Bertrand, vol iv pp 342-175

<sup>4</sup> O Chronista in Insuari, vol is p 51 Quoted in Fonscer's Goa, p 217 (bombay, 1878)

<sup>5</sup> Kelation de l'Injuition d'Goi, by the Physician Dellon, who was confined in one of its cells in 1674 Pyrird, Fryer, and other travellers have also left notices of the Goa Inquisition

<sup>6</sup> See his Letters and Journal dated 1808, pp. 150-176 of Christian Research vin Asia, 4th cd (1811)

autos da fe

punishments inflicted But the records repeatedly speak of the necessity for additional cells, and in 1674 they numbered Number of two hundred Seventy-one autos da fi, or general jail deliveries, are mentioned between 1600 and 1773 The total number of persons condemned on these occasions is unknown a few of the autos it is said that '4046 persons were sentenced to various kinds of punishment, of whom 3034 were males and 1012 females '1 These punishments included 105 men aid 16 women condemned to the flames, of whom 57 were burned alive and 64 in effigy

Christians set ex ample of relig ous persecu tion

It is not necessary to inquire how far such examples of religious punishment in Portuguese territory were responsible for the persecution of the Catholic missionaries in Cochin and Nor in passing judgment on the Hindu princes, should we forget the perpetual military aggressions and occasional cold blooded massicies by the Portuguese on the southern and western coasts Christian missions in Northern India had scarcely anything to fear from the native powers Indeed, under Akbar and almost throughout the entire period of the Mu hal Emperors until the accession of Aurungzeb, Christianity seems to have been regarded with an enlightened interest and certainly without disfavour, by the Delhi court Mere than one of the Mughal queens and princes are said to have been Christians, and the faith was represented both by Imperial grants and in the Imperial seriglio. Many of the great Hindu Feudstories also displayed a courteous indiffer ence to the Christian missionaries, and a liberal recognition of their scientific and secular attainments

In ,u -ition בין בין בין 1812

The Inquisition at Goa was temporarily suspended in 1774, but re-established in 1779. It was abolished in 1812, and the ancient palace in which it had been held wis pulled down in The debris were finally removed in 1859 on the occasion of the exposition of the body of St. Iraneis X wier-

The J 3 7-U, 11 5 1, i-59-75

In 1759, Tortugal broke up the Society of Jesus, seized 1's property, and imprisoned its members. I rance did the same in 1764, and to prevent greater early Clement xiv in 1773 was forced to suppress the Society altogether I rench Revolution followed I have events deprived the Indian

1 Dr. Fon ceas 6 a p 220 The original authorities quoted are () Chiem ta de Lissuary, Hi toria dos Lincifaes actos e Lio edimentos da In mer 75 cm Portugal, Lisbon, 1845, p. 5, and I. N. Navier in the cer mete l'itte arw, vol in pp 89 ind 280, Aurracco ca Injungão de 6 1 pp 143 1 my (Ara Goa, 1866

A popular account of its history will be found in Mr. 1. Relints I s. "History in a son at Gor," Calcula le re, No 145, April 1881

Jesuit missions alike of priests and of funds, and for a long time they languished, served in the south only by a few priests from Goa and Pondicherri That dismal period, however, presents some illustrious names, among them two well-known writers, the Abbé Dubois of Mysore, and the Carmelite Fra Paolino de San Bartholomeo (in India 1774-90) In the absence of priests to sustain the courage of the Christians, every occasional or local persecution told Tipú, about 1784, forcibly circumcised 30,000 Catholics of Kanara, and deported them to the country above the Ghats Many native Christians lived and died without ever seeing a priest, they baptized their own children, taught them the prayers, and kept up daily worship in their churches

Better days, however, dawned In 1814, the Society of The Jesus was re-established, under Gregory xvi, its missions Jesuits, began a new life, and have since made great progress prosperity is, however, hampered by the action taken in Europe 1814 The claims of Portugal to appoint against the religious orders the Archbishop of Goa and through him to regulate clerical patronage, as opposed to the right of the Pope, have occasioned schisms in the past and still give rise to discord

The Roman Catholics throughout all India, British, Feuda Number of tory, and Foreign, number altogether 1,356,037 souls, as Roman Catholics returned in the table to be presently given from the Madras in India Catholic Directory for 1885. The Census Report of 1881, adding the latest figures for Portuguese and French India, gives a total of 1,248,801

The Roman Catholic missions are maintained by many of Organiza the European nations, and are nearly equally divided between tion of the Roman the secular and regular clergy Almost every mission contains Catholic a mixture of races among its priests, even Holland, Scot ini sions land, and Germany being ably represented Although all are directed by Europeans, seven-eighths of the priests are natives. It is also worthy of remark that, in the list of bishops during the last 300 years, the names of several natives are found, some of them Brahmans The Roman Catholic missions are presided over by sixteen bishops (vicars and prefects apostolic), the delegates of the Pope, who governs the missions himself, without the intervention of the Camera side with these papal vicars apostolic, who are also bishops, the Archbishop of Gor (appointed by the King of Portugal) Arch has an independent jurisdiction over a certain number of bishop of Catholics outside his diocese, who are scattered over India, but chiefly in the south The prefect apostolic of Pondicherri

presides over the Catholics in several British Districts and throughout the southern French possessions In Pondicherri he has technically jurisdiction only over 'those who wear hats'

His sepa rate juris diction Juspati on-

The independent jurisdiction of the Archbishop of Goa, and the dissensions to which it gave rise, have been referred to It had its origin in the Jus patronatus granted by Pope atus 1600 Clement viii to King Philip By the Pontifical Bull, the Portuguese king was charged with the support of the Catholic churches in India, and in return was invested with the patronage of their clergy. On the ruin of the Portuguese power in India by the Dutch, it was held that the sovereign was no longer in a position to fulfil his part of the agreement The Indian clergy became a growing charge upon Rome In 1673, therefore, Clement x abrogated the jurisdiction of the Portuguese Archbishop of Goa beyond the limits of the Portuguese settlements In 1674, two Briefs declared that the Portuguese bishops had no authority over the vicars and missionaries-apostolic sent from Rome to India orders only produced a long ecclesiastical dispute ingly, in 1837, Gregory xvi published his Bull, Multa prædare dividing the whole of India into vicariates-apostolic, and forbade the Goanese prelates to interfere in their management

(oncordat

01 1857

of 1861

and the Indo-Lusitanum schisma continued until 1861 1857, a concordat was agreed to by the Pope and the King of Portugal, by which such churches as were then under the apostolic vicars should remain under the same, while those which then acknowledged the Goanese jurisdiction should Settlement continue under the Archbishop of Goa. In 1861, joint commissioners were sent out from Rome and Portugal to put this arrangement into execution In the end, the Pope granted for some time, 'ad tempus,' to the Archbishop of Goa an extraordinary jurisdiction over certain churches, seried by Goanese priests, but beyond the Portuguese dominions Such churches are still to be found in Malabar, Madura, Ceylon, Madras, Bombay, and apparently in the lower delta of Bengal It is intended that this independent jurisdiction of the Portuguese Archbishop of Goa shall in time lapse to the vicars apostolic appointed from Rome But meanwhile it continues to this day. and still gives rise to occasional disputes 1

The Portuguese Archbishop of Goa disregarded this decree,

1 The foregoing two paragraphs on the extraordinary jurisdiction of the Archbishop of Goa are condensed from us materials supplied to the author by the papal Vicar Apostolic of Veragoli

Curtailed, 1673

As the ecclesiastical and civil divisions of India do not Distribu correspond, it is difficult to compare missionary with official tion of Roman The Catholics in French territory numbered, Catholics according to the Madras Catholic Directory for 1885, 33,226. and in Portuguese territory in 1881, 252,477 1,070,334 Catholics for British India and the Native States, according to the Madras Directory for 1885, or 963,058 according to the Census Report of 1881 Catholics are most numerous in the Native States of Travancore and Cochin (comprised in the vicariates of Verapoli and Quilon) archdiocese of Goa, with 660 priests, nearly all natives, for a very small territory containing over 250,000 Catholics, is a witness to the sternly proselytizing system of the Portuguese

Verapoli, the smallest in area of the Roman vicariates, The These Verapoli contains the largest number of priests and Catholics are chiefly the descendants of the Nestorians converted to (Travan-Rome in the 16th century, and were divided by the Census core) of 1881 into two classes—of the Sylian rite, 141,386, and of the Latin rite, 80,600 They were directed by 14 European Carmelite priests, and by 375 native priests, 39 of the Latin rite, and 336 of the Syrian rite

The Census of 1881 returned the Syrian Christians alto-Syrian and gether apart from the Roman Catholics, but did not distin-Roman Catholic guish between Jacobites and Catholics of the Syrian rite Out Christians of a total of 304,410 Syrians in all India, 301,442 are returned by the Census Report as within the Native States of Travancore and Cochin (the vicariates of Verapoli and Ouilon) Census Report returned the total number of Roman Catholics in Travancore and Cochin at 274,734, while the returns officially accepted by the heads of the Catholic Church give the number in the Madras Catholic Directory at 378,096 From private inquiries since made, it appears that the discrepancy arises from the fact that the number of Catholics was underrated at the time of the Census About 100,000 Roman Catholics of the Syrian rite, belonging to the jurisdiction of the vicarsapostolic of Verapoli and Quilon, seem to have been included among the Syrian Jacobites

The Pondicherri and Madura vicariates represent parts of the famous Jesuit missions of Madura and of the Karnátic. In Bombay city, and along the fertile maritime strip or Konkan between the Western Gháts and the sea, the Roman Catholics form an important section of the native population

The following table shows the Roman Catholic population for all India, as returned by the authorities of the Church

VOL VI

# ROMAN CATHOLIC POPULATION OF BRITISH INDIA AND NATIVE STATES

(According to the 'Madras Catholic Directory' for 1885)

			Number
V icariate	Apostolio	of Madras,	56,548
,,	,,,	Haidarabad (Nizam's Dominions),	9,100
	,	Vizagapatam,	13,287
"	,,,	Mysore	27,429
,,	,	Combutore,	24,027
1)	,,	Madura,	176,169
,,	,,	Quilon (South Tiavancoie),	97,496
,,	,,	Verapoli (North Tiavancore and Cochin),	280,600
,	,,	Mangalore,	76,000
,,	,	Pondicherii (within I ritish Teilitory),	174 441
,	,,	Bombay,	51,025
,,	,,	Agia,	8 400
,,	**	Patna,	10,000
,,	17	Punjab,	5,900
,,	,,,	Western Bengal,	18,000
		ic of Cential Bengal	1,678
icariate	Apostol:	c of Eastern Bengal,	16,000
,,	"	Southern Burma,	17,580
,,	"	Eastern Burma,	6,654
7	Cotal in 1	British India and Native States,	1,070,334

# ROMAN CATHOLIC POPULATION OF PORTUCUI'SL SLTTLEMENTS IN INDIA

(According to the Census of Februa y 17th, 1881)

Gor,	250,645
Daman,	1,497
Diu,	335
Total in Pertomese Settlements in India	050 477

# ROVAN CATHOLIC POPULATION OF FRENCH SETTLEMENTS IN INDIA

(According to the 'Madras Catholic Directory' for 1885)

(, )	100)
Pondicherri, Karikal, Chandarnagai, Yanaon, Mahc,	18,889 12,787 300 450 800
Total in French Scitlements in India,	33,226
Grand Total in British, Native, and Foreign India,	1,356,037

The Roman Catholics in India steadily increase, and as in Catholic former times, the increase is chiefly in the south, especially in progress the missions of Pondicherri and Madura The number of Catholics in British and French India and the Native States. but exclusive of the Portuguese Possessions, rose from 732,887 in 1851, to 934,400 in 1871, and to 1,103,560 in 1881 The Pondi Pondicherri mission lately performed over 50,000 adult baptisms cherri Mission In the Madura vicariate, the increase is princiin three years pally in Tinnevelli and Rámnád The converts are chiefly agriculturists, but are by no means confined to the low castes

The principal Catholic colleges in India are those of the Catholic Society of Jesus, at Calcutta, Bombay, and Negapatam colleges, Another Jesuit college has lately been opened at Mangalore in South Kánara, a District in which there are over 3000 Catholic Brahmans England, being a Protestant country, supplies few priests, and hence Catholic missions have much difficulty in maintaining colleges where English is the vehicle of higher education The statistics of the Catholic schools are incomplete, owing to want of information about certain parts of the Goa jurisdiction But the number of Catholic and schools actually returned in 1880, including Goa, was 1514, schools with 51,610 pupils In British India and the Native States, the children in Catholic schools increased from 28,249 in 1871, to 44,699 in 1881

The Roman Catholics work in India with slender pecuniary resources They derive their main support from two great Catholic organizations, the Association for the Propagation of the Faith, and the Society of the Holy Childhood former contributes £,24,464 yearly to Indian missions, and the latter  $f_{12,300}$ , making a total of  $f_{36,764}$  This is exclusive of the expenditure within the Archbishopric of Goa, but it represents the European contributions to the whole Vicariates under the Pope In 1880 they maintained a staff of 16 bishops and 1118 priests, teaching 1236 schools, with 40,907 pupils, and giving religious instruction to 1,002,379 native Christians The Roman Catholic priests deny themselves the comforts considered necessaries for Europeans in India In many Districts they live the frugal and abstemious life of the natives, and their influence reaches deep into the social life of the communities among whom they dwell

The first Protestant missionaries in India were I utherans, First Pro Ziegenbalg and Plutschau, who in 1705 begin work under the testant missions, patronage of the King of Denmark at the Danish settlement 1705

Translation of the Bible, 1725

of Tranquebar Ziegenbalg and many of the early Lutheran missionaries were men of great ability, and, besides their translations of the Scriptures, some of their writings still hold a high place in missionary literature. Ziegenbalg began the translation of the Bible into Tamil, and his successor Schultze completed it in 1725 This was the first Protestant translation of the Scriptures in India Schultze also translated the whole Bible into Hindustani. Ziegenbalg died in 1719, leaving 355 converts In spite of the patronage of the Kings of Denmark and England, and the liberal assistance of friends in Europe, the Lutheran mission made at first but slow progress, and was much hindered and opposed by the local Danish authorities Gradually it extended itself into Madras, Cuddalore, and Tanjore, schools were set up, and conversion and education went hand in hand

Schwartz ın Tan jore, 1750-98 Serampur mission aries

Kier nander in Calcutta, 1758 Carey. 1793

31 transla

Official opposi tion with drawn,

1813

In 1750, arrived the pious Schwartz, whose name is bound up with the history of Tanjore and adjacent Districts until his death in 1708 He was the founder of the famous Tinnevelli missions 1 Next to the Lutherans come the Baptists of Serampur, with the honoured names of Carey, Marshman, and Ward. In the 18th century, the English East India Company did not discourage the labours of Protestant missionaries It had allowed Kiernander, originally sent out by the Danes, to establish himself at Calcutta in 1758 subsequently, it put every obstacle in the way of missionaries, and deported them back to England on their landing arrived in 1793 In 1799, to avoid the opposition of the English East India Company, he established himself with four other missionaries at Serampur (15 miles from Calcutta), at that time, like Tranquebar, a Danish possession Then began that won derful literary activity which has rendered illustrious the group of 'Serampur missionaries' In ten years, the Bible was transtions of the lated, and printed, in whole or part, in 31 languages, and by 1816, the missionaries had about 700 converts. The London Missionary Society (established 1795) entered the field in 1798, and its missions have gradually grown into importance

The opposition of the East India Company continued till 1813, when it was removed by the new Charter document provided for the establishment of the hishopric of Calcutta, and three archdeaconries, one for each Presidency Up to this period the Established Church of England had attempted no direct missionary work, although some of the East India Company's chaplains had been men of zeal, like the

<sup>2</sup> See article TINEVELLI, I'le Imperial Gazetteer of India

ardent Henry Martyn (1806-11) The first Bishop of Calcutta Bishopric (Middleton) arrived in 1814 From this time the Church of of Cal England has constantly kept up a missionary connection with 1814. India, chiefly by means of its two great societies—the Church Missionary Society, which sent out its first representative in 1814, and the Society for the Propagation of the Gospel, which did so in 1826 Their most successful stations are in Southern India. where they have gathered in the seed sown by the Lutheran missions The second Bishop of Calcutta was the well-known Heber (1823-26) In 1835, under a new Charter of the East Indian India Company, the see of Madras was established, and in Sees 1837, that of Bombay In 1877, owing to the extension of mission work in Tinnevelli, two missionaries were appointed bishops, as assistants to the Bishop of Madras, the dioceses of Lahore and Rangoon also were separated from Calcutta, and bishops appointed The missionary bishopric of Travancore and Cochin was established in 1879 It has no connection with Government, nor have the assistant bishops in Madras

The first missionary of the Church of Scotland was Dr Presby Alexander Duff (1830–63), to whom the use of English as terian missions, the vehicle of higher education in India is largely due Mis-1830-63 sionaries of numerous other Protestant societies (European Other and American) have since entered India, and established missions numbers of churches and schools. They have furnished memorable names to the roll of Indian educators, such as Judson (Baptist) in Burma, 1813–50, and John Wilson (Presbyterian) of Bombay, 1843–75

The progress of the several Protestant missions in India Statistics may be thus stated —In 1830 there were 9 societies at of Pro work, and about 27,000 native Protestants in all India, missions Ceylon, and Burma By 1870 there were no less than 35 societies at work, and in 1871 there were 318,363 converts (including Ceylon, etc., as above) In 1852 there were 459 Protestant missionaries, and in 1872 there were 606 Between 1856 and 1878, the converts made by the Baptist Progress, Societies of England and America, in India, Ceylon, and 1878 Burma, increased from about 30,000 to between 80,000 and 90,000 Those of the Basle missions of Germany multiplied from 1060 to upwards of 6000, those of the Wesleyan Methodist missions of England and America, from 7500 to 12,000, those of the American Board, from 3302 to

progress. 1556 1878

Protestant about 12,000, those of the Presbyterian missions of Scotland, England, Ireland, and America, connected with 10 societies, from 821 to 10,000, those of the missions of the London Missionary Society, from 20,077 to 48,000, and those of the Church Missionary Society and of the Society for the Propa gation of the Gospel, from 61,442 to upwards of 164,000 1

Great native Protest 1881

The increased activity of the Protestant missionary bodies increase of in India, during the past third of a century, may be seen from the table 2 on the following page Between 1851 and 1881, the ant, 1851- number of mission stations has increased nearly threefold, while the number of Native Protestant Christians has multiplied by more than fivefold, the number of communicants by nearly tenfold, and the number of churches or congregations by This is partly due to the extended employment of native agency in the work. The native ordained pastors have been increased from 21 in 1851 to 575 in 1881, and the native lay preachers from 493 to 2856 The Protestant Church in India has greatly gained in strength by making a freer use of, and reposing a more generous confidence in, its native agents Its responsible representatives report the increase of Native Christians in India Burma, and Ceylon,3 from 1851 to 1861. at 53 per cent, from 1861 to 1871, at 61 per cent, and from 1871 to 1881, at 86 per cent

Extended use of native agency

School work of Prote-tant mis- ons

The activity of the Protestant missions has not, however, been confined to the propagation of their faith. Their services to education, and especially in the instruct on of the people in the vernacular languages, will hereafter be referred to But the vast extension of these services during late years is less generally recognised The number of pupils in Protestant mission schools and colleges has risen from 64,043 in 1851 to 196,360 in 1881, or more than threefold. The standard of instruction has risen at an equal pace, and the mission institutions successfully compete with the Government colleges at the examinations of the Calcutta, Madris, and Bombay Universities Female education has always formed a subject

Its rapid develop ment 1851 81

Female education

<sup>1</sup> The Rev M A Sherring, in the Chronicle of the I ondon Missionary Society, August 1879

<sup>&</sup>lt;sup>2</sup> Compiled from The Statistical Tables for 1881, issued under instruc tions of the Calcutta Missionary Conference (Thacker, Spink, & Co, (alcutta, 1682) It should be remembered that the statistical organization was more perfect in 1881 than in 1851. To Mr W Rees Philipps this chapter is indebted for many materials and figures regarding Indian Christian missions in their earlier years

<sup>8</sup> He tab'e given on next page deals only with India and Burma, and excludes Cevion Up at pp x and xiii

of peculiar care among the missionary bodies The number of girls' day schools belonging to Protestant missions in India alone has risen from 285 in 1851 to 1120 in 1881 This is exclusive of girls' boarding schools and zanana work total number of female pupils, under Protestant mission teaching in India alone, exclusive of Burma, has multiplied from 11,193 in 1851 to 57,893 in 1881

The great success of the missionaries of late years in their Extended school work, as in their preaching, is due to the extended use of native use of native agency Complete statistics are available on agency this point only for 1871 and 1881 The number of 'Foreign'1 and Eurasian male teachers belonging to Protestant missions in India and Burma, has decreased from 146 in 1871 to 101 in 1881, while the native Christian teachers have been doubled, from 1978 in 1851 to 3675 in 1881. In 1881, there were also 2468 non-Christian native teachers employed, making a total of 6143 native teachers in missionary employ in 1881, against 101 'Foreign' and Eurasian teachers The native female teachers, Christian and non Christian, have increased from 863 in India and Burma in 1871, to 1996 in 1881 following table may now be left to speak for itself —

SUMMARY OF PROTESTANT MISSIONS IN INDIA AND BURMA

	Number in 1851	Number   in 1861	Number in 1871	Number in 1881
Stations, Foreign a and Eurasian or	222	337	448	601
dained agents,	339	501	517	622
Native orduned agents,	21	143	302	575
Foreign and Eurasian lay preachers,				77
Native lay preachers,	493	1,677	2,344	2,856
Churches or congregations,	267	643	2,631	4,180
Native Christians,	91,092	198,097	286,987	492,882
Communicants,	14,601	43,415	73,330	138,254
Male pupils in schools,	52,850/	64,828	100 750	138,477
Female pupils in schools,	11,1936	17,035	27,627	57,893
pupils,	64,0438	81,863	128,377	196,360.

a Including British, European, American, and all others, not natives of

b The pupils for 1851 were in India only, no retuins being available for Burma for that year

c The return of total pupils is exclusive of 65,728 boys and guls attending Sunday schools The returns for 1851 and 1861 are as a whole less com plete than those for 1871 and 1861

<sup>&</sup>lt;sup>1</sup> Including British, European, American, and all non Indian teachers.

General Statistics of Chris tian population in India

The foregoing pages have briefly traced the history of Christianity in India, and disclose the recent progress made by its main branches, Catholic and Protestant, among the It remains to exhibit the Christian population as a whole, including both Europeans and Indians In comparing the results, it must be borne in mind that the figures have been derived from various sources, and that the areas of enumeration in some cases overlap each other. Thus, the jurisdictions of the Catholic vicars-apostolic supply a basis for calculation which differs from the territorial areas adopted by the Census of British India Every effort has been made to allow for such causes of error, and to render the following tables a true presentment of the Christian population of India, British, Feudatory, and Foreign observed that the total number of Christians has increased during the nine years from 1872 to 1881 by 365,251 British India alone the increase has been 270,807 or 30 2 per The total number of Christians was 2,148,228 in 1881, as against 1,782,977 in 1872

European and Native

TOTAL CHRISTIAN POPULATION IN INDIA IN 1872 AND IN 1881

1	1872	1881	Increase	Percentage of Increase	
In British India,	897,682	1,168,489	270,807	30 2	1
In Native States,	620,295	694,036	73,741	119	higures for
In Portuguese India,	235,000	252 477	17 477	7 4	1872 less complete
In French India,	30,000	33,226	3,226	10 7	than for
Total,	782,977	2,148,228	_ 365,251 	20 4	<u> </u>

Denomi national Statistics, 1881 The Census of 1881 returned the Christian population in British and Native India, according to sect. This return is useful as affording a test of the figures given in the foregoing pages from the Roman Catholic and Protestant missions. It will be observed that the two sets of figures practically agree, allowing for differences in the areas of the enumeration. In the total for all India these sources of discrepancy disappear, but it must be remembered that that total includes both Europeans and natives

# CHRISTIAN POPULATION OF INDIA ACCORDING TO SFCT

(As returned by the Census of 1881)

Wadras, Bombay, Bengal         189,218         1 637         4 667         20 266           Bengal, Benga	BRITISH DISTRICTS  4 667 20 20 86  23 533 18 962  4 8 3 23 23  17 3 320  5 346  15 36 56 112  29 568 105 418  NAINI SIATH	473 352 26 725 8 021 9 384 9 33 3 35 1 628 1 628 6 62 6 62 6 62 6 62 6 62 6 63 6 63 7 68	888 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		25 9031 10 5/44 20 741 20 741 30 90 1 227 1 227 1 595 615 615	711 037 138 317 128 100 33 420 47 90 11 949 1 335 2 225 3 152 84 215
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1,109 5,76° 80  20,638 1,619 23,533  20,838 1,619 23,533  20,838 1,619 23,533  4,523 1,619 23,533  1,676 1,619 1,639  1,676 1,639  1,676 1,639  1,676 1,639  1,676 1,639  1,676 1,639  1,676 1,689  1,67		109 456 26 728 8 024 9 384 5 833 351 6 52 16,281 652 99	64 100 100 100 100 100 100 100 100 100 10	1,3850 1,3850 1,445,534 1,536	1954 1954 1831 3995 1227 595 615 74295	138 317 128 100 138 100 140 40 1 949 1 335 2 225 3 152 84 215 1 168 489
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Portuguese India, general return practically all Catholics,	ntuguese India, general return	ractically all Cal	thotics,			252 477
French India	ench India Do	g 10				93 248

Norz.—No details are available of the different vects of Christians in Portuguese and French India But for all practical purposes the number of Roman Catholics may be taken as the total Christian popul tition. Adding therefore, to the above figures, 253,477 Catholics in Portuguese Settlements (1881), and 33 226 Christians is obtained for all india, Buthsh, Feudatory, and Rone, in Rome, in Marive States of Pudukota, Banganapalli, and Sindur a Aconsiderable discrepancy occurs between the number of Roman Catholics in Travincore and Cochin States as returned by the Consus of 1881, and that returned by the Roman Catholic authorities as shown on a previous page. I his difference it has been explained, apprently arises from he fact that the Roman Catholic under estimated in the Census returns by the evelusion of ilout too coo Syran Christians who acknowledge, the jurisdiction of the Virars Apostolic of Verspoli and Quiton, and by their inclusion among the Jacobites who we unconnected with the Roman Catholic Church

Ecclestastical establish ment The Government of India maintains an ecclesiastical establishment for its European soldiers and officials. It devotes on an average £660,000 a year to their medical requirements, and £160,000 to their spiritual wants <sup>1</sup> The two following tables show the ecclesiastical staff, and the number of soldiers and Government servants who attend their ministrations. In making up the second table, it has not been found practicable to bring the statistics of attendance beyond the date of the last Parliamentary return of 1880. During the year 1879, to which the attendance columns in the second table refer, a large European force was absent in the field, and the church attendance of Luropean troops was decreased by about 13,000 officers and men

INDIAN ECCIESIASTICAL STAFF, 1884

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Che registrar of the Cleutta Diocese is also registrar of the Lahore Diocese

In the following table, it should be borne in mind that the salaries and number of chaplains refer to 1884, while the attendance is that of 1879, when a large force was in the field. The attendance in ordinary years is estimated

I These are the senior Presbyterian Chapmans in the three I residences

c 14 s is an allowance for furnishing each wast cal actums for it insmission to Ingland paid to certain Roman Catholic Bisheps in official communication with the British Government. The number of a sholic Bishops is sixteen for all India.

I here is also in intermed ate cass on £300 per annum. In addition to their rates of pay. Roman Catholic priests receive horse allowance at £36 per mum.

 $<sup>^1</sup>$  The average cost of the ecclesiastical establishment during the ten years ending 1883, was £160,657

at over 50,000 This would raise the total Church attendance of British troops and Government servants (exclusive of women and children) to about 55,000

# INDIAN ECCIESIASTICAL MINISTRATIONS

1	Calaues ind Allowances (1884)	No of I shops, Archdeacons Chaplams or Munsters (1884)	Number of European Troops and Officers ordinarily at tending Church (1879)	Number of other Government Servants (excluding Wives and Children) ordinarily at tending Chuich (1879)	Total of Covernment Servants attending Church (1879)
Church of Lngland	£124 175	167	23 842	3191	27 033
Church of Scotland	10 445 1	13	2 782	479	3 261
Church of Rome	1 31 251	79	10 586	621	11 207
Total	£165,871	259	37 210	4291	41 501

### CHAPIER X

# EARLY MLHAMMADAN RULERS (711 TO 1526 AD)

Eurly Arab Arabia
expeditions to
Bombav his dea
coast, 636 far as 1711 A D

While Buddhism was giving place to Hinduism throughout India, and Christianity under Nestorian bishops was spreading along the coast of Malabar, a new faith had arisen in Arabia. Muhammad, born in 570 AD, created a conquering religion, and died in 632. Within a hundred years after his death, his followers had invaded the countries of Asia as far as the Hindu Kush. Here their progress was stayed, and Islám had to consolidate itself, during three more centuries, before it grew strong enough to grasp the rich prize of India. But, almost from the first, the Arabs had fixed eager eyes upon that wealthy country. Fifteen years after the death of the prophet, Usman sent a sea-expedition to Thana and Broach on the Bombay coast (647 ? AD). Other raids towards Sind took place in 662 and 664, with no results

Muhammadan settlement in Sind, 711 S28?

In 711, however the youthful Kásım advanced into Sind, to claim damages for an Arab ship which had been seized at an Indian port After a brilliant campaign, he settled himself in the Indus valley, but the advance of the Musalmans depended on the personal daiing of their leader, and was arrested by his death in 714 AD The despairing valour of the Hindus struck the invaders with wonder. One Raiput garrison preferred extermination to submission I hay raised a huge funeral pile, upon which the women and children first threw The men then bathed, took a solemn farewell themselves of each other, and, throwing open the gates, rushed upon the besiegers and perished to a man In 750, the Rápputs are said to have expelled the Muhammadan governor, but it was not till 828 AD that the Hindus regained Sind

Their ex pulsion, 828 A D

India on the eve of the Muham madan conquest, 1000 A D The armies of Islam had carried the crescent from the Hindu Kush westwards, through Asia, Africa, and Southern Furope, to distant Spain and Gaul, before they obtained a foothold in the Punjab This long delay was due, not only to the daring of individual tribes, such as the Sind Rájputs just

mentioned, but to the military organization of the Hindu kingdoms To the north of the Vindhyas, three separate groups of princes governed the great river-valleys Rapputs ruled in the north-west, throughout the Indus plains, Hindu and along the upper waters of the Jumna The ancient kingdoms —(1) of the Middle Land of Sanskrit times (Madhya-desha) was divided north, among powerful kingdoms, with their suzerain at Kanauj The lower Gangetic valley, from Behar downwards, was still in part governed by Pál or Buddhist dynasties, whose names are found from Benares to jungle buried hamlets deep in the Bengal delta. The Vindhya ranges stretched their wall of forest and mountain between the northern and southern halves of India. Their eastern and central regions were peopled by (2) of the fierce hill tribes At their western extremity, towards the south Bombay coast, lay the Hindu kingdom of Málwa, with its brilliant literary traditions of Vikramáditya, and a vast feudal array of fighting men India to the south of the Vindhyas was occupied by a number of warlike princes, chiefly of non-Aryan descent, but loosely grouped under three great over-lords, represented by the Chera, Chola, and Pandya dynasties 2

Each of these groups of kingdoms, alike in the north and Hindu in the south, had a certain power of coherence to oppose to a power of foreign invader, while the large number of the groups and units rendered conquest a very tedious process For even when the over-lord or central authority was vanquished, the separate groups and units had to be defeated in detail, and each State supplied a nucleus for subsequent revolt We have seen how the brilliant attempt in 711, to found a lasting Muhammadan dynasty in Sind, failed Three centuries later, the utmost efforts of two great Musalman invaders from the north-west only succeeded in annexing a small portion of the frontier Punjab Province, between 977 and 1176 AD The Hindu power in Slow pro Southern India was not completely broken till the battle of gress of Muham Talikot in 1565, and within a hundred years, in 1650, the great madans in Hindu revival had commenced which, under the form of the India Maráthá confederacy, was destined to break up the Mughal

1 For example, at Sabhar, on the northern bank of the Burnganga, once the capital of the Bhuiya or Buddhist Pal Raja Harrschandra In 1839, the only trace that remained of his traditional residence was a brick mound, covered with jungle See Hunter's Statistical Account of Bengal, vol v pp 72, 73, 118 In Lower Bengal, the Buddhist Pals had given place to the Brahmanized Sens of Nadiya before the Muhammadans reached that Province for the first time in 1199

2 See The Imperial Gazetter of India, articles CHERA, CHOIA, and PANDYA

Their success short lived.

Empire in India That Empire, even in the north of India, had only been consolidated by Akbar's policy of incorporating Hindu chiefs and statesmen into his government (1556-1605) Up to Akbar's time, and even during the earlier years of his reign, a series of Ruput wars had challenged the Muham madan supremacy In less than two centuries after his death, the successor of Akbar was a puppet in the hands of the Hindu Maiathas at Delhi

Muham madan cond tests only par tial,

The popular notion that India fell an easy prey to the Musalmans is opposed to the historical facts. Muhammadan rule in India consists of a series of invasions and partial conquests, during eleven centuries, from Usmán's raid, arc 647. to Ahmad Shah's tempest of invasion in 1761 AD represent in Indian history the overflow of the nomad tribes of Central Asia, towards the south east, as the Huns, Lurks, and various Taitar tribes disclose in early Luropean annals the westward movements from the same great breeding ground of At no time was Islam triumphant throughout the whole of India Hindu dynasties always ruled over large At the height of the Muhummadan power, the Hindu princes paid tribute, and sent agents to the Imperial Court But even this modified supremacy of Delhi lasted for little over a century (1578-1707) Before the end of that brief period. the Hindus had begun the work of reconquest chivalry of Raiputána was closing in upon Delhi from the south, the religious confederation of the Sikhs was growing into a military power on the north west. The Marithas had combined the fighting powers of the low castes with the statesthe Musal manship of the Brahmans, and were subjecting the Muhammadan kingdoms throughout all India to tribute can now be estimated the advance of the I nglish power at the beginning of the present century alone saved the Mughal Empire from passing to the Hindus

and tem porary

Hindus rcconquer India from mans, 1707 61

> This chapter will necessarily confine its survey to the essential stages in the spread of the Musalman conquest, and will pass lightly over the intermediate princes or minor dynasties who flit across the scene 1. The annexed summary presents a view of the whole -

> <sup>1</sup> The Hon Mountstuart Elphinstone's History of India is still the standard popular work on the Muhammadan period. Professor Cowell's edition (Murray, 1866) incorporated some of the new materials accumu lated since Mr Elphinstone wrote. But much of the original work is a reproduction of Firishta, and requires to be rewritten from Sir Henry Llliot's Persian Illistorians and the results of the Archaelogical and

# SUMMARY OF MUHAMMADAN CONQUERORS AND DYNASTIES OF INDIA (1001-1857)

I House of Ghazni (Turki) 1001-1186 Mahmud of Ghazni to Sultan Khusru Pp 272-75 II HOUSE OF GHOR (Afghan?) 1186-1206 Muhammad Ghori (Shahab ud din) Pp 275-78 III SLAVE KINGS (chiefly Turki) 1206-1290 Kutab ud din to Bal ban and Kaikubad Pp 278 80 IV House of Khilji (Turki?) 1290-1320 Talal ud din to Nasir ud dın Khusru Pp 280-83 I Holse of Tughlak (Punjab Turks), 1320-1414 Pp 283-86 1320 Ghiyas ud din Tughlak P 283 1324 Muhammad Tughlak Pp 283-85 1351 Firuz Tughlak P 285 1414 Endofthedynasty P 286 Irruption of the Mughals under Timur (Tamerlane) in 1398-99, leaving behind him a fifteen vears' anarchy under the last of the line of Tughlak, until the accession of the Sayyids m 1414 P 285 ] VI THE SALVIDS 1414 1450 Cuitailed power of Delhi P 286 fassim VII THE LODIS (Afghans) 1450-1526 I ceble reigns, inde pendent States P 286 VIII House of Timor (Mughal), 1526-1857

1526-1530 Bibar

15.0 1556 Humayun Pp 290 91

[Sher Sháh, the Afghan gover nor of Bengal, drives Huma yún out of India in 1540, and his Afghan dynasty rules till 1555 P 291] 1556-1605 Akbar the Great Pp 291-300 1605-1627 Jahangir Pp 300-302 1628-1658 Shah Jahan, deposed Pp 302-305 1658-1707 Aurangzeb or Alam-Pp 306-312 gir I 1707-1712 Bahadur Shah, or Shah Alam I P 312 1712 Jahandar Shah P 312 1713-1718 Farrukhsiyyar P 312 1719-1748 Muhammad Shah (after two boy Emperors) Pp 312-313 [Irruption of Nadir Shah the Persian, 1738 - 1739 313-15] 1748-1754 Death of Muhammac1 Shah, and accession of Ahmad Shah, deposed 1754 1754-1759 Alamgir II P 313 [Six invasions of India by Ahmad Shah Durani, the Afghan, 1748 – 1761 313-15] 1759-1806 Shah Alam II, titular Lmperor P 31, 1806-1834 Akbai II , titular Em peror P 313 1834-1857 Muhammad Bahadur Shah, titular Emperor, the seventeenth and last Mughal Emperoi, died a State piisoner at Rangoon in 1862 P 313

Statistical Surveys—The present chapter has chiefly used besides Flphinstone, the following works for the Muhammadan period—(1) Sir Henry I lliot's History of India as told by its own Historians, ie the Arab and Persian travellers and writers, edited by Professor Dowson, 8 vols 1867-77 (Trubner), (2) Mr Edward Thomas' Chronicles of the Pathán Kings of Delhi, especially for reigns from 1193 to 1554, for which period be gives the initial dates of the Hijra years (Trubner, 1871), (3) Mr Edward Ihomas' Receive Kessure's of the Mughal Empire, with his manuscript marginal notes, (4) Lieut Colonel Brigg's Translation of Muhammad Kasim Firishta's History of the Rise of the Muhammadan

P 200

First Turki invasions

Subukti gin, 977

A D

The first collision between Hinduism and Islam on the Punjab frontier was the act of the Hindus In 977, Jaipal, the Hindu chief of Lahore, annoyed by Afghán raids, led his troops up the passes against the Muhammadan kingdom of Ghazní, in Afghánistan Subuktigin, the Ghaznivide prince, after severe fighting, took advantage of a hurricane to cut off the Hindu retreat through the pass He allowed them, however, to return to India on the surrender of fifty elephants, and the promise of one million dirhams (about £,25,000)1 Tradition relates how Jaipal, having reguined his capital, was counselled by the Bráhman, standing at his right hand, not to disgrace himself by paying ransom to a barbarian, while his nobles and warrior chiefs, standing at his left, implored him to keep faith In the end, Subuktigin swept down the passes to enforce his ransom, defeated Jaipál, and left an Afghán officer with 10,000 horse to garrison Peshawar Subuktigin was soon afterwards called away to fight in Central Asia, and his Indian raid left behind it only this outpost? But henceforth, the Afghans held both ends of the passes

Mahmud

1001-1030

In 997, Subuktigin died, and was succeeded by his son, Mahmud of Ghazni aged sixteen This valiant monarch of Ghazni, reigned for thirty-three years,3 and extended the limits of his father's little Afghán kingdom from Persia on the west, to deep into the Punjab on the east Having spent four years in consolidating his power to the west of the Khaibar Pass, he led His seven- forth in 1001 A.D the first of his seventeen4 invasions of India.

teen inva sions,

Power in India (5) Reports of the Archæological Survey of Western 1001-1026 India, and materials supplied by the Statistical Survey of the various Provinces of India, (6) Professor Blochmann's Ain i Akhari (Calcutta, 1873), together with Gladwin's older translation (2 vols 1800) When the dates or figures in this chapter differ from Elphinstor c's, they are derived from the original Persian authorities, as adopted by Sir Henry Elliot and Mr Thomas

<sup>1</sup> The Tarikh Yamıni, written cuc 1020, by Al 'Utbi, a secretary of Sultan Mahmud, is the contemporary authority for this invasion translated in Sir Henry Elliot's Persian Historians, vol 11 pp 18-24 The materials for the invasions of Subuktigin are Firishia, 1 pp 11-25 (ed 1829) . and Sir Henry Elliot's Persian Historians, vols ii iii iv and vi.

<sup>2</sup> His chronicler, Al 'Utbi, never once mentions Delhi or Lahore

5 The Tabakát i Nasiri (Sir Henry Elliot's Persian Historians, vol 11 p 270) speaks of the '36th year of his reign' But the dates 997 to 1030 seem authoritative The original materials for the invasions of Mahmud are Firishta, 1 pp 37-82, and Sir Henry Elliot's Persian Historians. sols i ii in and iv

4 This number, and subsequent details, are taken from the authorities translated in Sir Henry Elliot's Persian Historians, vols ii iii iv , and critically examined in the Appendix to his second volume, pp. 434,478 (1869)

Of these, thirteen were directed to the subjugation of the Punjab, one was an unsuccessful incursion into Kashmir, the remaining three were short but furious raids against more distant cities—Kanaul, Gwalior, and Somnáth

Taipal, the Hindu frontier chief of Lahore, was again defeated According to Hindu custom, a twice-conquered prince was deemed unworthy to reign, and Jaipal, mounting a funeral pile, solemnly made over his kingdom to his Patriotic son, and burned himself in his regal robes Another local devotion of the chief, rather than yield himself to the victor, fell upon his Hindus, own sword In the sixth expedition (1008 AD), the Hindu 1008 AD ladies melted their ornaments, while the poorer women spun cotton, to support their husbands in the war. In one great battle, the fate of the invaders hung in the balance Mahmúd, alarmed by a coalition of the Indian kings as far as Oudh and Malwa, entrenched himself near Peshawar A sortie which he made was driven back, and the wild Ghakkar tribe 1 burst into the camp and slaughtered nearly 4000 Musalmans

But each expedition ended by further strengthening the Mahmud's Mahmud carried away progress in India, Muhammadan foothold in India enormous booty from the Hindu temples, such as Thaneswar 1001-1024 and Nagarkot, and his sixteenth and most famous expedition was directed against the temple of Somnath in Gujarat (1024 AD) After bloody repulses, he stormed the town, and the Hindu garrison, leaving 5000 dead, put out in boats to sea. The famous idol of Somnath was merely one of the twelve lingas or phallic emblems erected in various parts of India But Mahmud having taken the name of the 'Idol-Smasher,' Fapedition the modern Persian historians gradually converted the plunder to Som of Somnáth into a legend of his pious zeal Forgetting the contemporary accounts of the idol as a rude stump of stone, Firishta tells how Mahmud, on entering the temple, was offered

1 Firishta 5255, '30,000 (shakkars with their heads and feet bare' Colonel Bigg's Firishta, vol 1 p 47 (ed 1829) Elphinstone gives the number of Mahmud's expeditions somewhat differently from the number and order adopted in the above text from the Persian authorities, translated by Sir Henry Elliot Thus Elphinstone gives the expedition of 1008 A D as the fourth (p 328), while Sir Henry Elliot gives it as the sixth (Persian Historians, vol 1 p 444) In the same way, Elphinstone gives the Somnath expedition as the twelfth (p 334, ed 1866), while Sir Henry Elliot gives it as the sixteenth (vol 11 p 468) These instances must suffice to indicate the differences between Elphinstone and the later materials derived from Sir Henry Elliot and Mr Edward Thomas subsequent pages, the more accurate materials will be used without pausing to point out such differences

Fiction of the jewel bellied god

an enormous ransom by the priests if he would spare the image <sup>1</sup> But Mahmúd cried out that he would rather be remembered as the breaker than the seller of idols, and clove the god open with his mace. Forthwith a vast treasure of jewels poured forth from its vitals, which explained the liberal offers of the priests, and rewarded the disinterested piety of the monarch. The growth of this myth can be clearly traced, <sup>2</sup> but it is still repeated by uncritical historians. The linga or solid stone fetish of Somnáth, had no stomach, and could contain no jewels

I he sandal wood gates Mahmud carried off the temple gates, with fragments of the phillic emblem, to Ghazni, and on the way nearly perished with his army in the Indus desert. But the famous 'Sandal wood gates of Somnath,' brought back as a trophy from Ghazni by our troops in 1842, and paraded through Northern India, were as clumsy a forgery as the story of the jewel bellied idolitself. Mahmud died at (rhazni in 1030 4 D

Results of Mahmud's invasions 10,0 A P As the result of seventeen invasions of India, and twenty-five years' fighting, Mahmud had reduced the western districts of the Punjab to the control of Ghazni, and left the remem brance of his raids as far as Kanauj on the east, and Gujarat in the south. He never set up as a resident sovereign in India. His expeditions beyond the Punjab were the adventures of a religious knight errant, with the plunder of a temple city, or the demolition of an idol, as their object, rather than serious efforts at conquest. But as his father had left Peshawar as an outpost garrison so Mahmud left the Punjab as an outlying Province of Ghazni.

I he Punjab miguered Mahmud s justice and thrift.

The Muhammadan chroniclers tell many storics, not only of Mahmud's valour and piety, but also of his thrift. One day a poor woman complained that her son had been killed by robbers in a distant desert of Irak. Mahmud said he was very sorry, but that it was difficult to prevent such accidents so far from the capital. The old woman rebuked him with these words,

<sup>&</sup>lt;sup>1</sup> Colonel Bugg's Firishta, vol 1 pp 72, 73 (cd 1829)

<sup>&</sup>lt;sup>2</sup> Sir H. Liliot's History of India from the Persian III torium, vol. ii p. 270, from the Tabal at i Násiri, also Appendix, vol. ii p. 476 vol. iv p.p. 182, 183, from the Habbu's Sizar of Khondanur. But sec, even in 1832, II H. Wilson in the Asiatu Acsearches, vol. xvii. pp. 194 et sig. A foundation for Firishta's invention is, however, to be found in the contemporary account of Al Biruni (970 1029 A ii), who says that the top of the linga was garnished with gems of gold.

<sup>&</sup>lt;sup>3</sup> Of the four fragments, le deposited one in the Jama Masjid at Ghazri, another at the entrance of his palace, and the third he sent to Mecca, and the fourth to Medina Tabal dt i Nastra

'Keep therefore no more territory than you can rightly govern' The Sultan forthwith rewarded her, and sent troops to guard all caravans passing that way Mahmud was an enlightened patron of poets, and his liberality drew the great Ferdousi to Ferdousi his court The Sultan listened with delight to his Shah-namah, or Book of Kings, and promised him a dirham, meaning a golden one, for each verse on its completion. After thirty years of labour, the poet claimed his reward But the Sultán finding that the poem had run to 60,000 verses, offered him 60,000 silver dirhams, instead of dirhams of gold Ferdousi retired in disgust from the court, and wrote a bitter satire which records to this day the base birth of the monarch Mahmud forgave the satire, but remembered the great epic, and, repenting of his meanness, sent 100,000 golden dirhams to the poet The bounty came too late For as the royal messengers bearing the bags of gold entered one gate of Ferdousi's city, the poet's corpse was being borne out by another

During a century and a half, the Punjab remained under House of But in 1152, Ghor, Mahmúd's successors, as a Province of Ghazni the Afghans of Ghor 1 overthrew the Ghaznivide dynasty, and Khusrú, the last of Mahmud's line, fled to Lahore, the capital of his outlying Indian territory In 1186, this also was Obtains wrested from him, 2 and the Ghorian prince Shahab-ud-dín, the Punjab, better known as Muhammad of Ghor, began the conquest of 1186 India on his own account But each of the Hindu principalities fought hard, and some of them still survive seven centuries after the torrent of Afghán invasion swept over their heads

On his first expedition towards Delhi, in 1191, Muhammad Muham of Ghor was utterly defeated by the Hindus at Thaneswar, mad of Ghor's badly wounded, and barely escaped with his life His scattered invasions, hosts were chased for 40 miles But he gathered together High-1206 the wreck at Lahore, and, aided by new hordes from Central defeat, Asia, again marched into Hindustan in 1193 Family quarrels 1191 among the Rajputs prevented a united effort against him

<sup>1</sup> Ghor, one of the oldest seats of the Afghan race, is now a ruined town of Western Afghanistan, 120 miles south east of Heiat The feud between Ghor and Ghazni was of long standing and great bitterness Mahmud of Ghazni had subdued Ghor in 1010 AD, but about 1051 the Ghorian chief captured Ghazni, and dragged its chief inhabitants to Ghor, where he cut their throats, and used their blood for making mortar for the fortifications After various repusals, Ghor finally triumphed over Ghazni in 1152

<sup>2</sup> Tabakát i Násiri Sir II Ellist's Persian Historians, vol u p 281

Dissen sions among the Hındu plinces

The cities of Delhi and Kanauj stand forth as the centres of rival Hindu monarchies, each of which claimed the first place in Northern India A Chauhán prince, ruling over Delhi and Almere, bore the proud name of Prithwi Rájá or Suzerain The Rahtor king of Kanaui, whose capital can still be traced across eight square miles of broken bricks and rubbish,1 celebrated a feast, in the spirit of the ancient Horse-sacrifice,2 to proclaim himself the Over-lord

Court pageant at Kanauj, 12th cen tuy AP

A 57 72

maiden -

choice

At such a feast, all menial offices had to be filled by royal vassals, and the Delhi monarch was summoned as a gatekeeper, along with the other princes of Hindustan During the ceremony, the daughter of the King of Kanaui was nomin ally to make her savay amvara, or 'own choice' of a husband, a pageant survival of the reality in the Sanskrit epics Delhi Ruá loved the maiden, but he could not brook to stand at another man's gate. As he did not arrive, the Kanauj king set up a mocking image of him at the door amrara cr the princess entered the hall to make her choice, she looked calmly round the circle of kings, then stepping proudly past them to the door, threw her bridal garland over the neck of the ill-shapen image Forthwith, says the story, the Delhi monaich rushed in, sprang with the princess on his horse, and galloped off towards his northern capital outraged father led out his army against the runaways, and, having called in the Afghans to attack Delhi on the other side, brought about the ruin of both the Hindu kingdoms

In time tion cf Raiputcrc 1154

The tale serves to record the dissensions among the Rajput princes, which prevented a united resistance to Muhammad of Ghor He found Delhi occupied by the Tomára clan, Ajmere by the Chauhans, and Kanauj by the Rahtors I hese Raiput States formed the natural breakwaters against invaders from But their feuds are said to have left the King the north-west of Delhi and Ajmere, then united under one Chauhan Overlord, only 64 out of his 108 warrior chiefs. In 1193, the Afghans again swept down on the Punjab Prithwi Rája of Delhi and Ajmere 9 was defeated and slain His heroic princess burned herself on his funeral pile. Muhammad of Ghor, having occupied Delhi pressed on to Aimere, and in

- 1 See article KANAUJ, The Imperial Gazetteer of India
- <sup>2</sup> Aswa medha, described in a previous chapter

<sup>4</sup> Descended from the eponymous Raja Aja of Ajmere, ene 145 A D . and on the mother's side, from Anang Pal Tuai, Raja of Delhi, who adopted him, thus uniting Delhi to Ajmere See article AJMERE MER WARA, in The Imperial Gazetteer of India

1194, overthrew the rival Hindu monarch of Kanauj, whose body was identified on the field of battle by his false teeth The brave Rahtor Rájputs of Kanauj, with other of the Rajput Rájput clans in Northern India, quitted their homes in large migrations into Raj bodies rather than submit to the stranger They migrated butana to the regions bordering on the eastern desert of the Indus, and there founded the military kingdoms which bear their race-name, Rainutana, to this day

History takes her narrative of these events from the matterof-fact statements of the Persian annalists 1 But the Hindu court-bard of Prithwi Raja left behind a patriotic version of the fall of his race His ballad chronicle, known as the Prithwirás Rásau of Chánd, is one of the earliest poems in Hindí It depicts the Musalman invaders as beaten in all the battles except the last fatal one Their leader is taken prisoner by the Hindus, and released for a heavy ransom quarrels of the chiefs ruined the Hindu cause

Setting aside these patriotic songs, Benares and Gwalior mark the south-western limits of Muhammad of Ghor's own advance But his general, Bakhtiyar Khilji, conquered Behar in 1199,2 Muham and Lower Bengal down to the delta in 1203 On the conquest of approach of the Musalmans, the Brahmans advised Lakshman Bengal, Sen, the King of Bengal, to remove his residence from Nadiyá 1203 to some more distant city But the prince, an old man of eighty, could not make up his mind until the Afghán general had seized his capital, and burst into the palace one day while his majesty was at dinner The monarch slipped out by a back door without having time to put on his shoes, and fled to Puri in Orissa, where he spent his remaining days in the service of Jagannáth 3

Meanwhile the Sultán, Muhammad Ghorí, divided his time between campaigns in Afghánistán and Indian invasions, and he had little time to consolidate his Indian conquests Even in the Punjab, the tribes were defeated rather than subdued. In 1203, the Ghakkars issued from their mountains,

<sup>1</sup> Firishta (1 161-187), the Tabakht 1 Nasiri of Minhaju's Siraj, and others, translated in Sir Henry Elliot's Persian Historians, vols ii v and vi

<sup>&</sup>lt;sup>2</sup> History of Bengal from the first Muhammadan Invasion to 1757, by Major Charles Stewart, p 25 (Calcutta, 1847) The nearly contemporary nuthority is the Tabalat i Nasiri (1227-41), Sir H Elliot's Persian His torians, vol u pp 307-309

<sup>3</sup> Stewart, p 27 The Tabakat 1 Nasırı merely says 'he went towards Sunknat (sec) (Jagannath?), Sir H Elhot's Persian Historians, vol 11 p 309

took Lahore, and devastated the whole Province In 1206, a party of the same clan swam the Indus, on the bank of which the Afghán camp was pitched, and stabbed the Sultán to death while asleep in his tent 3

Muham mad of (shor's work in India, 1191-1206 Muhammad of Ghor was no religious knight-errant like Mahmúd of Ghazni, but a practical conqueror. The objects of his distant expeditions were not temples, but Provinces Subuktigín had left Peshawar as an outpost of Ghazni (977 a.d.), and Mahmud had reduced the western Punjab to an outlying Province of the same kingdom (1030 a.d.). That was the net result of the Turki invasions of India. But Muhammad of Ghor left the whole north of India, from the delta of the Indus to the delta of the Ganges, under Muhammadan generals, who on his death set up for themselves

Northern India sub dued

Kutab ud din 1206-10, His Indian Vicerox, Kutab-ud-din, proclaimed himself sovereign of India at Delhi, and founded a line which lasted from 1206 to 1200. Kutab claimed the control over all the Muhammadan leaders and soldiers of fortune in India from Sind to Lower Bengal. His name is preserved at his capital by the Kutab Mosque, with its graceful colonnade of richly-sculptured. Hindu pillars, and by the Kutab Minar, which raises its tapering shaft, encrusted with chapters from the Kuran, high above the ruins of old Delhi Kutab ud din had started life as a Turki slave, and several of his successors rose by valour or intrigue from the same low condition to the throne. His dynasty is accordingly known as that of the Slave Kings. Under them India became for the first time the seat of resident Muhammadan sovereigns Kutab-ud-din died in 1210.

first Slave Kmg

Tic Slive

Innary,

1200-90

The Slave Dynasty found itself face to face with the three perils which have beset the Muhammadan rule in India from the outset, and beneath which that rule eventually succumbed First, rebellions by its own servants, Musalman generals, or vicerous of Provinces second, revolts of the Hindus,

<sup>1</sup> F rishta, vel 1 pp 182-184

<sup>-</sup> As far south as the country near Multan, Tajn l Ma asm, Sir II Elliot's Persian Historians, vol 11 pp 233-235, Ianikh i Alfi, v 163 the Muhammadan historians naturally minimize this episode

<sup>&</sup>lt;sup>3</sup> Sir II Elhot's Persian Historians, vol 11 pp 235, 297, 393 Brigg's Firishta, vol pp 185, 186

<sup>\*</sup> The Imperial Gazetteer of Indian, article DEI HI CITY

<sup>&</sup>lt;sup>5</sup> The original materials for Kutab ud din Aibak's reign are to be found in Ini Ita, vol 1 pp 189 202 (ed 1829), and the Persian Historians, translated by Sir Henry Elliot, vols 11 m 17 and v

third, fresh invasions, chiefly by Mughals, from Central Asia

Altamsh, the third and greatest Sultán of the Slave line Its difficul (1211-36 AD), had to reduce the Muhammadan Governors of ties Lower Bengal and Sind, both of whom had set up as independent rulers, and he narrowly escaped destruction by a Mughal invasion The Mughals under Changiz Khán swept through the Indian passes in pursuit of an Afghán prince, but their progress was stayed by the Indus, and Delhi remaired untouched Before the death of Altamsh (1236 AD), the Hindus Altamsh had ceased for a time to struggle openly, and the Muhammadan 1211-36 Viceroys of Delhi ruled all India on the north of the Vindhya range, including the Punjab, the North-Western Provinces, Oudh, Behar, Lower Bengal, Almere, Gwalior, Malwá, and The Khalif of Baghdad acknowledged India as a separate Muhammadan kingdom during the reign of Altamsh, and struck coins in recognition of the new Empire of Delhi (1229 AD) 1 Altamsh died in 1236

His daughter Raziyá was the only lady who ever occupied The the Muhammadan throne of Delhi (1236-39 AD) Learned Empres in the Kurán, industrious in public business, firm and energetic 1236-39 in every crisis, she bears in history the masculine name of the Sultan Raziva. But the favour which she showed to the master of the horse, an Abyssinian slave, offended her Afghan generals, and after a troubled reign of three and a half years, she was deposed and put to death 2

Mughal irruptions and Hindu revolts soon began to under-Mughal mine the Slave dynasty The Mughals are said to have burst irruptions through Tibet into North-Eastern Bengal in 1245,3 and 1244 88 during the next forty-four years, repeatedly swept down the Afghán passes into the Punjab (1244-88) The wild Indian tribes, such as the Ghakkars 4 and the hillmen of Mewat, ravaged the Muhammadan lowlands almost up to the capital

1 Chronicles of the Pathan Kings of Delhi, by Edward Thomas, p 46 (Milne, 1871) Original materials for Shams ud din Altamsh Firishta, vol 1 pp 205-212 (1829), Sn Henry Elliot's Persian Historians, vols 11 113 17

\* Thomas' Chronules of the Pathan Kings, pp 104-108 Firishta, vol 1 pp 217-222, Sir Henry Elliot's Persian Historians, vols ii and iii

3 This invasion of Bengal is discredited by the latest and most critical historian, Mr Edward Thomas, in his Pathan Kings of Delhi, p 121, note (cd 1871) On the other side, see Firishta, vol 1 p 231, but cf (of Brigg's footnote, and the Tabakat & Nasril in Sir H Elliot's Persian Historians, vol 11 pp 264, 344, 'In March 1245, the infidels of Changiz Khan came to the gates of Lakhnauti' (Gaur)

<sup>4</sup> For an account of the Ghakkars, ride ante, p 186, chap vii

Rapput revolts

Rajput revolts foreshadowed that inextinguishable vitality of the Hindu military races, which was to harass, from first to last, the Mughal Empire, and to outlive it. Under the Slave kings, even the north of India was only half subdued to the Muhammadan sway The Hindus rose again and again in Malwa, Ráiputana, Bundelkhand, along the Ganges, and in the Jumna valley, marching to the river bank opposite Delhi itself 1

balban 1265-87

The last monarch but one of the Slave line, Balban (1265-87 AD), had not only to fight the Mughals, the wild non-Aryan tribes, and the Raiput clans, he was also compelled to Having in his youth entered massacre his own viceroys into a compact for mutual support and advancement with torty of his Turki fellow slaves in the palace, he had, when he came to the throne, to break the powerful confederacy thus formed Some of his provincial governors he publicly scourged, others were beaten to death in his presence, and a general, who failed to reduce the rebel Muhammadan Viceroy of Bengal, was hanged Balban himself moved down to the delta, and crushed the Bengal revolt with a merciless His severity against Hindu rebels knew no bounds He nearly exterminated the Jadun Raiputs of Mewat, to the south of Delhi, putting 100,000 persons to the sword then cut down the forests which formed their retreats, and opened up the country to tillage I he miseries caused by the Mughal hordes in Central Asia, drove a crowd of princes and 11 - nfteen poets to seek shelter at the Indian court Balban boasted that no fewer than fifteen once independent sovereigns had fed on his bounty, and he called the streets of Delhi by the names of their late kingdoms, such as Bághdad Kharizm, and Ghor He died in 1287 AD? His successor was poisoned, and the

His ruelties to the Hm ms

H use of Khilii 12)0 1320

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In that year Jalal-ud din, a ruler of Khilif, succeeded to the Delhi throne, and founded a line which lasted for thirty years (1290-1320 AD) The Khilji dynasty extended the Muhammadan power into Southern India Alá-ud dín, the nephew and successor of the founder, when Governor of Karra,4 near Allahábad, pierced through the Vindhya ranges

1 Thomas' Pathan Kings, 131

Slave dynasty ended in 1290

- Materials for the reign of Lalban (Gloyas ud din Balban) Sir Henry I that's Persian Historians, vol in pp 38, 97, 546, 593 (1871), Firish'a, vil 1 pp 247-272 (1829)
  - ' Mr F Ihomas' Pathan Kings, pp 138-142
- 4 Forty miles north west of Allahabad, once the capital of an important fief, now a ruined town See The Imperial Gautteer of India, article KAKRA

with his cavalry, and plundered the Buddhist temple city of Bhilsa, 300 miles off After trying his powers against the Ala ud rebellious Hindu princes of Bundelkhand and Malwa, he din's Southern conceived the idea of a grand raid into the Deccan With raids. a band of 8000 horse, he rode into the heart of Southern 1294. On the way he gave himself out as flying from his uncle's court, to seek service with the Hindu King of Rájámahendri The generous Rajput princes abstained from attacking a refugee in his flight, and Alá ud dín surprised the great city of Deogiri, the modern Daulatábád, at that time the capital of the Hindu kingdom of Maharashtra Having suddenly galloped into its streets, he announced himself as only the advance guard of the whole imperial army, levied an immense booty, and carried it back 700 miles to the seat of his Governorship on the banks of the Ganges He then lured the Sultan Jalal ud-din, his uncle, to Karra, in order to divide the spoil, and murdered the old man in the act of clasping his hand (1295 AD)1

Ala-ud-din scattered his spoils in gifts or charity, and pro- Reign of claimed himself Sultan (1295–1315 AD) <sup>2</sup> The twenty years Ala ud din, 1295– of his reign founded the Muhammadan sway in Southern 1315 India He reconquered Gujarat from the Hindus in 1297, Ala ud captured Rintimbur, after a difficult siege, from the Jaipur din's re conquest of Rajputs in 1300, took the fort of Chittor, and partially sub- N India, jected the Sesodia Rajputs (1303), and having thus reduced 1295 1303 the Hindus on the north of the Vindhyas, prepared for the conquest of the Deccan But before starting on this great expedition, he had to meet five Mughal inroads from the north In 1295 he defeated a Mughal invasion under the walls of his capital, Delhi, in 1304-5 he encountered four others, sending all prisoners to Delhi, where the chiefs were trampled by elephants, and the common soldier, slaughtered in cold blood He crushed with equal screnty several rebellions which took place among his own family during the same period, first putting out the eyes of his insurgent nephews, and then beheading them (1209-1300)

Having thus arranged his affairs in Northern India, he under-His contook the conquest of the South—In 1303 he had sent his quest of Southern cunuch slave, Malik Káfur, with an army through Bengul, to India, attack Warangal, the capital of the Hindu kingdom of Teling- 1303-15

<sup>1</sup> Thomas' Pathan Kings, p 144

<sup>&</sup>lt;sup>2</sup> Materials for the reign of Alaud din Khilji Sn Henry Elliot's Persian Historians, vol in. (1871), Firishta vol 1 pp 321-382 (1829)

<sup>3</sup> See which RINIMBUR, The Imperial Gas their of India

In 1306, Kafur marched victoriously through Málwá and Khandesh into the Maráthá country, where he captured Deogin, and persuaded the Hindu king Rám Deo to return with him to do homage at Delhi While the Sultan Ala ud-dín was conquering the Rájputs in Marwar, his slave general, Kafur, made expeditions through the Karnátic and Mahá rashtra, as far south as Adam's Bridge, at the extremity of India, where he built a mosque

His gene ral Mulik Kafur

Extent of the Mu hammadan power in Îndin, 1306

The Muhammadan Sultan of India was no longer merely an Afghan king of Delhi I hree great waves of invasion from Central Asia had created a large Muhammadan population in Northern India. First came the Turkis, represented by the house of Ghazni then the Afgháns (commonly so called), represented by the house of Ghor, finally the Mughals, having failed in their repeated attempts to conquer the Punjab, took service in great numbers with the Sultans of Delhi Under the Slave Kings the Mughal mercenaries had become so powerful as to require to be massacred (1286) About 1292, three thousand Mughals, having been converted from their old Tartar rites to Muhammadanism, received a suburb of Delhi, still called Mughalpur, for their residence Other immigrations of Mughal mercenaries followed After various plots Ala ud-din slaughtered 15,000 of the settlers, and sold their families as slaves (1311 AD)

Muham madan population in India, 1286 1311

Mughal mercen aries 1286 1311

H nda reve to

The unlimited supply of soldiers which Alá-ud din could thus draw upon from the Turkí, Afghan, and Mughal races in Northern India and the countries beyond, enabled him to send armies farther south than any of his predecessors But in his later years, the Hindus revolted in Guiarat, the Ráiputs reconquered Chittor and many of the Muham madan garrisons were driven out of the Deccan capture of Chittor in 1303, the garrison had preferred death to The peasantry still chant an early Hindi ballad, telling how the queen and thirteen thousand women threw themselves on a funeral pile, while the men rushed upon the swords of the besiegers A remnant cut their way to the Aravalli Hills, and the Rapput independence, although in abeyance during Ala-ud-din's reign, was never crushed. Having imprisoned his sons, and given himself up to paroxysms of rage and intemperance, Ala-ud din died in 1315, helped to the grave, it is said, by poison given by his favourite general. Arenegade Kafur

Hindu 1 mour or 1,16 20.

During the four remaining years of the house of Khihi, the actual power passed to Khusru Khán, a low caste renegade Hindu, who imitated the military successes and vices of his Khusru patron, Malik Káfur, and then personally superintended his murder <sup>1</sup> Khusrú now became all in all to the debauched Emperor Mubarik, slew him, and seized the throne While outwardly professing Islam, Khusrú desecrated the Kuran by using it as a seat, and degraded the pulpits of the mosques into pedestals for Hindu idols In 1320 he was slain, and the Khilji dynasty disappeared <sup>2</sup>

The leader of the rebellion was Ghiyás-ud-din Tughlak, who had started life as a Turki slave, and risen to the frontier Governorship of the Punjab He founded the Tughlak House of dynasty, which lingered on for ninety-four years (132c-1414), Tughlak, although submerged for a time by the invasion of Timur (Tamerlane) in 1398 Ghiyas-ud din Tughlak (1320-24 AD) removed the capital from Delhi to a spot about four miles further east, and called it Tughlakabad

His son and successor, Muhammad Tughlak (1324-51), Muham was an accomplished scholar, a skilful captain, and a severely mad Jughlak abstinent man <sup>3</sup> But his ferocity of temper, perhaps inherited 1,24 51 from the tribes of the steppes, rendered him merciless as a judge and careless of human suffering The least opposition drove him into outbursts of insane fury He wasted the treasures accumu- Muham lated by Ala-ud-din in buying off the Mughal hordes, who again mad Tughlak and again swept down on the Punjab On the other hand, in mad ex fits of ambition, he raised an army for the invasion of Persia, peditions and sent out an expedition of 100,000 men against China 1324 51 The first force broke up for want of pay, and plundered his own dominions, the second perished almost to a man in the Himá-He planned great conquests into Southern layan passes India, and dragged the whole inhabitants of Delhi, 800 miles His off, to Deogiri, to which he gave the name of Daulatabad ciuelties I wice he allowed the miserable suppliants to return to Delhi, twice he compelled them on pain of death to quit it of these forced migrations took place amid the horrors of a famine, the citizens perished by thousands, and in the end the king had to give up the attempt. Having drained his treasury, he issued a forced currency of copper coins, by His forced which he tried to make the king's briss equal to other men's currence

Thomas Pathan Kings, pp. 178, 179 "Itm, pp. 184, 185
Materials for his reign Sir Henry Elliot Risian Historians, vols 1
111 v vi vii, Firishta, vol 1 pp. 408-443 (ed. 1829), Elphinstone's narrative of this reign is an admirable specimen of his spirited etyle of work, pp. 403, 410 (ed. 1866)

silver 1 During the same century, the Mughal conqueror of China, Kublai Khan, had expanded the use of paper notes, carly devised by the Chinese, and Kai Khatú had introduced a bad imitation of it into Persia Tughlak's forced currency quickly brought its own ruin Foreign merchants refused the worthless brass tokens, trade came to a stand, and the king had to take payment of his taxes in his own depreciated coinage

Revolt of the Pro vinces, 1338 51

Meanwhile the Provinces began to throw off the Delhi yoke Muhammad Tughlak had succeeded in 1324 to the greatest Empire which had, up to that time, acknowledged a Muham madan Sultan in India But his bigoted zeal for Islam forbade him to trust either Hindu princes or Hindu officers, and he thus found himself compelled to fill every high post with toreign Muhammadan adventurers, who had no interest in the stability of his rule. The annals of the period present a long series of outbreaks, one part of the Empire renouncing its allegiance as soon as another had been brought back to subjection His own nephew rebelled in Malwa, and being caught, was flaved alive (1338) I he Punjab governor revolted (1339), was crushed, and put to death The Musalman Viceroys of Lower Bengal and of the Coromandel coast set up for themselves (about 1340), and could not be subdued The Hindu kingdoms of Kurnata and Telingana recovered their independence (1344), and expelled the Musalman garrisons The Muhammadan governors in the Deccan also revolted, while the troops in Gujarat rose in mutiny hammad Tughlak rushed with an army to the south to take vengeance on the traitors but hardly had he put down their rising than he was called away by insurrections in Gujarat, Malwa, and Sind He died in 1351, while chasing rebels in the lower valley of the Indus

He flays nephew

His reign one long revoil

Muliam mad Tughlak s 1evenue exactions, 1325-51

Muhammad Tughlak was the first Musalman ruler of India who can be said to have had a revenue system He increased the land-tax between the Ganges and the Jumna, in some Districts ten fold, in others twenty fold. The husbandmen fled before his tax-gatherers, leaving their villages to lapse into tungle, and formed themselves into robber clans punished all who trespassed on his game preserves, and he invented a kind of man hunt without precedent in the annals Harmon of human wickedness. He surrounded a large tract with his army, 'and then gave orders that the circle should close

hunt'

<sup>1</sup> Thomas Pathan Aines, p 243 See his valuable monograph entitled 'Mi hammad Bin Tughlak's Forced Currency,' of cit pp 239 261

towards the centre, and that all within it (mostly inoffensive peasants) should be slaughtered like wild beasts. This sort of hunt was more than once repeated, and on a subsequent occasion, there was a general massacre of the inhabitants of the great city of Kanauj These horrors led in due time to famine, and the miseries of the country exceeded all powers of description '1

His son, Firuz Tughlak (1351-88), ruled mercifully, but Firuz Shah had to recognise the independence of the Muhammadan Tughlak, hingdoms of Bengal and the Decean and suffered much first 1351-88 kingdoms of Bengal and the Deccan, and suffered much from bodily infirmities and court intrigues 2. He undertook many public works, such as dams across rivers for irrigation, tanks, caravan-saráis, mosques, colleges, hospitals, and bridges But his greatest achievement was the old Jumna Canal This Hiscanals work drew its waters from the Jumna, near a point where it leaves the mountains, and connected that river with the Ghaggar and the Sutley by irrigation channels." Part of it has been reconstructed by the British Government, and spreads a margin of fertility on either side to this day. But the dynasty of Tughlak soon sunk amid Muhammadan mutinies and Hindu revolts, and under Mahmud, its last real king, Mahmud Northern India fell an easy prey to the great Mughal invasion Tughlik of 1398

In that year, I imúr (I ameriane) swept through the Afghán Timurs passes at the head of the united hordes of Tartary defeated the Tughlak King, Mahmud under the walls of invasion, Delhi, and entered the capital During five days, a massacre 1398 raged, 'some streets were rendered impassable by heaps of dead.'4 while limur calmly looked on and held a feast in honour of his victory On the last day of 1398 he resumed his march, with a 'sincere and humble tribute of grateful praise' to God, in Firus marble mosque on the banks of the Jumna He crossed the Ganges, and proceeded as far as Hardwar, after another great massacre at Mediut Then skirting the foot of the Himalayas, he retired through their north-western passes into Central Asia (1399)

Limur leit no traces of his power in India, save ruined Ruin of Cities On his departure, Mahmud Lughlak crept back from the Tugh laks, 1399

1 Elphinstone's Ilistors of India, pp 405, 406 (ed 1866)

<sup>&</sup>quot; Materials for his reign Sir Henry Flhot's Persian Historians, vols 1 m w w vm Firishta, vol 1 pp 444-465 (ed 1829)

See article JUNA CANAL, 1 Ihomas Pathan Ain, s, p 294 Wisiern. The Imperial Gasther of India

<sup>4</sup> Firishta, vol 1 p 493 His whole account of Timur's invasion is very vivid, vol 1 pp 485 497 (ed 1829)

his retreat in Gujarát, and nominally ruled till 1412 The Tughlak line ended in 1414.

The Say yide, 1414-50.

It was succeeded by the Sayyıd dynasty, who ruled from 1414 till 1450 The Afghan house of Lodi followed, from 1450 to 1526 But some of these Sultans reigned over only a few miles round Delhi, and during the whole period, the Hindu princes and the local Muhammadan kings were practically independent throughout the greater part of India. The house of The Lodes, I odi was crushed beneath the Mughal invasion of Bábar in 1526

1450 1526

Hındu kingdoms of the Deccan

Babar founded the Mughal Empire of India, whose last 1862

Chera, Chola, and Pandyn

representative died a British State prisoner at Rangoon in Before entering on the story of that great Empire, we must survey for a moment the kingdoms, Hindu and Muhammadan, on the south of the Vindhva range. The three ancient kingdoms, Chera, Chola, and Pandya occupied, as we have seen,1 the Dravidian country peopled by Tamil-speaking races Pándya, the largest of them, had its capital at Madura, and traces its foundation to the 4th century BC kingdom had its head-quarters successively at Combaconum and Tanjore Talkad, in Mysore, now buried by the sands of the Kaver, was the capital of the Chera lingdom 116th king of the Pandya dynasty was overthrown by the Muhammadan general Malik Káfur, arc 1304 But the Musalmans failed to establish their power in the extreme south, and a series of Hindu dynastics ruled from Madura over the old Pandya kingdom until the 18th century No European kingdom can boast a continuous succession such as that of Madura, traced back by the piety of genealogists to the 4th century BC The Chera kingdom enumerates fifty kings, and the Chola sixty-six, besides minor dynasties

wing lent of Vija a nagar, 1118 1565

But authentic history in Southern India begins with the Hindu kingdom of Vijayanagar or Narsinha, which flourished from 1118 to 1565 AD The capital can still be traced within the Madras District of Bellary, on the right bank of the I ungabhadra river,—vast ruins of temples, fortifications, tanks, and bridges, now inhabited by hyænas and snakes. For at least three centuries, Vijayanagar dominated the southern part of the Indian peninsula Its Rájás waged war and made peace on equal terms with the Muhammadan Sultans of the Deccan

Those Sultans derived their origin from the conquest of 1 At the beginning of this chapter, and articles CHERA, CHOLA, PANDIA, in The Imperial Gazetteer of India

Alá-ud-dín (post 1303 A D) After a period of confused fighting, Muhamthe Bahmani kingdom of the Deccan emerged as the representative of Muhammadan rule in Southern India. Its founder, in the Zafar Khan, an Afghan general during the reign of Muhammad Deccan, Tughlak (1325-51), defeated the Delhi troops, and set up as 1303 Musalmán sovereign of the Deccan Having in early youth been the slave of a Brahman who had treated hin kindly and foretold his future greatness, he took the title of Bahmaní,1 and transmitted it to his successors

The rise of the Bahmani dynasty is usually assigned to The the year 1347, and it lasted for 178 years, until 1525 2 Its Bahmani dynasty, successive capitals were Gulbargah, Warangal, and Bídar, all in 1347 1525 the Haidarábád territory, and it loosely corresponded with the Nizám's Dominions of the present day At the height of their power, the Bahmani kings claimed sovereignty over half the Deccan, from the Tungabhadra river in the south to Orissa in the north, and from Masulipatam on the east to Goa on the Their direct government was, however, much more confined. In their early struggle against the Delhi throne, they derived support from the Hindu southern kingdoms of Vijayanagar and Warangal But during the greater part of its career, the Bahmani dynasty represented the cause of Islam against Hinduism on the south of the Vindhyas Its alliances and its wars alike led to a mingling of the Musalman and Hindu populations

For example, the King of Malwa invaded the Bahmani Composte dominions with a mixed force of 12,000 Afgháns and Rajputs armies 1347 1525 The Hindu Rájá of Vijayanagar recruited his armies from Afghan mercenaries, whom he paid by assignments of land, and for whom he built a mosque The Muhammadan Bahmani troops, on the other hand, were often led by converted Hindus The Bahmani army was itself made up of two hostile Mingling sects of Musalmans One sect consisted of Shias, chiefly and Musal Persians, Turks or Tartars from Central Asia, the other, of mans native-born Musalmans of Southern India, together with Abyssinian mercenaries, both of whom professed the Sunni faith The rivalry between these Musalman sects frequently imperilled the Bahmani throne The dynasty reached its highest power Fall of under the Bahmani Alá-ud-dín 11 about 1437, and was broken dynasty, up by its discordant elements between 1489 and 1525

1489 1525

1 His royal name in full was Sultan (or Shah) Ala ud din Gango Bahmani.

<sup>&</sup>lt;sup>2</sup> These extreme dates are taken from Thomas' Pathán Kings, pp 340, 341 Materials for the Bahmani dynasty Sir Henry Elhot's Persian Historians, vols iv vii viii , Firishta, vol ii pp 283-558 (ed 1829)

Five Mu States of the Deccan, 1489 1688

Out of its fragments, five independent Muhammadan king hammadan doms in the Deccan were formed These were—(1) The Adil Shahi dynasty, with its capital at Bijapur, founded in 1489 by a son of Amurath IL, Sultán of the Ottomans, annexed by the Mughal Emperor Aurangzeb in 1686-88 (2) I he Kutab Sháhi dynasty, with its capital at Golconda, founded in 1512 by a Turkomán adventurer, also annexed by Aurangzeb in 1687-88 (3) The Nizám Shahi dynasty, with its capital at Ahmadnagar, founded in 1490 by a Brahman renegade from the Vijayanagar Court, subverted by the Mughal Emperor Shah Jahan in 1636 (4) The Imad Shahi dynasty of Berar, with its capital at Ellichpur, founded in 1484 also by a Hindu from Vijayanagar, annexed to the Ahmadnagar kingdom (No 3) in 1572 The Band Shahi dynasty, with its capital at Bidar, founded 1492-1498 by a Turki or Georgian slave The Barid Shahi territories were small and undefined independent till after Bidai fort was finally taken by Aurangzeb in 1657

Fall of Hingu kingdom of Vijayanagar

Battle of Talil of 1,65

Space precludes any attempt to trace the history of these local Muhammadan dynasties of Southern India They preserved their independence until the firm establishment of the Mughal Finpire in the north, under Akbar's successors For a time they had to struggle against the great Hindu kingdom of Vijayanagar In 1565 they combined against that power, and, aided by a rebellion within Vijayanagar itself they overthrow it at Talikot in 1565 The battle of Talikot marks the final downfill of Vijaya

nagar as a centralized Hindu kingdom But its local Hindy chiefs or Nayaks seized upon their respective fiefs. and the Muhammadin kings of the south were only able to annex a part of its dominions From the Nayaks are descended the well-known Palegars of the Modras Presidency, and the present Maharaja of Mysoic One of the blood royal of Vijayanagar fled to Chandrigin, and founded a line which exercised a prerogative of its former sovereignty by granting the site of Madras to the English in 1639 scion, claiming the same high descent, lingers to the present cay near the ruins of Vijavanagar, and is known as the Rajá of Anagundi, a feudatory of the Nizam of Haidarabad independence of the local Hindu chiefs in Southern India, throughout the Muhammad in period, is illustrated by the Manjarábad family, which maintained its authority from 1307

to 1799 1 Lower Bengal threw off the authority of Delhi in 1340 Its 1 See article MANJARABAD, The Imperial Gazetteer of India

Inacpend ent Naviks and Pale gar- of Sou he n Ind -

Muhammadan governor, Fakír-ud din, set up as sovereign, with Indepen his capital at Gaur, and stamped coin in his own name succession of twenty independent kings ruled Bengal until 1538, 1340 1576. when it was temporarily annexed to the Mughal Empire by It was finally incorporated with that Empire by Akbar in 1576 The great province of Gujarat in Western India Of Guja had in like manner grown into an independent Muhammadan rat, 1391-1573, kingdom, which lasted for two centuries, from 1391 till conquered by Akbar in 1573 Malwá, which had also set up as an independent State under its Muhammadan governors, was annexed by the King of Gujarát in 1531 Even Jaunpur, Of Jaun including the territory of Benares, in the very centre of the pur, 1394-Gangetic valley, maintained its independence as a separate 1478 Musalman State for nearly a hundred years from 1394 to 1478, under the disturbed rule of the Sayvids and of the first Lodi at

VOL VI

# CHAPTER XI

# THE MIGHAI EMPIRE (1526 10 1761 AD)

WHEN therefore, BABIR invaded India in 1526, he found it

Failv life at Babar, 1482 1526

Stac of India in

1526

divided among a number of local Muhammadan kings and Hindu princes. An Afghan Sultan of the house of Lodi, with his capital at Agra, ruled over what little was left of the historical kingdom of Delhi Babar literally the Lion, born in 1482, was the sixth in descent from limur the Partar the early age of twelve he succeeded his father in the petty kingdom of Ferghana on the Javartes (1494) and after romantic adventures, conquered Simirkind the capital of Tamerlane's line in 1407 Overpowered by rebellion, and driven out of the Valley of the Oxus, he seized the kingdom of Kabul in 1504 During twenty two years he grew in strength on the Atanan side of the Indian passes, till in 1526 he burst through them into the Punjab and defeated the Delhi sovereign Ibrahim Lodi at Pánipit 1 his was the first of the three great battles which decided the fate of India on that same plain, vi in 1526, 1556, and 1761. Having entered Della, he received the allegiance of the Muhammadans, but was specially attribed by the Rapputs of Chittor In 1527, Babar deteated them at Fatehpur Sikri near Agra, after a battle memorable for its perils and for Babar's vow, in his extremity, never again to touch He rapidly extended his power is far as Multan and wine He died at Agra in 1530, leaving an Empire which Behar

1520 In 'es of t'an pa

Inva es In ira

on puers Not hern It lin, 1,26 30

make over Kabul and the Western Punjib to his rival brother Kamran. Humayun was thus left to govern a new conquest,

stretched from the river Amu in Central Asia to the borders

Humaven, Emperor, 1530-56

# A D TREES OF HE MAYES -

of the Gangetic delta in Lower Benga

1530 Accession to the throne Capture of Lakore and occupation of the Punjah by his rival brother Kamran Final defeat of the Lodis under Mahmud I odi, and acquisition of laungur by Humayun

1532 Humayun's campaign in Malwa and Gujarit

[Leotnote continued on next fage

and at the same time was deprived of the base from which his father had drawn his supplies. The Mughal hordes who had accompanied Bábar were more hateful to the long-settled Indian Afgháns than the Hindus themselves After ten years of fighting, Humáyún was driven out of India by the Bengali Humáyún Afgháns under Sher Sháh, the Governor of Bengal While fly-expelled by Sher ing through the desert of Sind, as an exile to Persia, his famous Shah. son Akbar was born to him in the petty fort of Umarkot (1542) Sher Shah set up as Emperor, but was killed while storming Afghan the rock-fortress at Kalınjar (1545) His son succeeded to dynasty of Delhi, his power But under his grandson, the third of the Afghán 1540-56 house, the Provinces revolted, including Malwa, the Punjab. and Bengal Humáyún returned to India, and with Akbar, then only in his thirteenth year, defeated the Indo-Afghán army after a desperate battle at Pánípat (1556) India now passed finally from the Afghans to the Mughals Sher Shah's line dis-Humayun appears, and Humayún, having recovered his Kabul dominions, regains his throne reigned again for a few months at Delhi, but died in 1556

AKBAR THE GREAT, the real founder of the Mughal Empire Akbar the as it existed for two centuries, succeeded his father at the age of Great, fourteen 1 Born in 1542, his ruign lasted for almost fifty years, from 1556 to 1605, and was therefore contemporary with that of our own Queen Elizabeth (1558-1603) His father, Humayún, left but a small kingdom in India, scarcely extending beyond the districts around Agra and Delhi At the time of Humavún's death, Akbar was absent in the Punjab under the guardianship of Buram Khan, fighting the revolted Aighans Bairam, a Turkoman by birth, had been the support of the exiled Humayun, and held the real command of the army which restored him to his throne at Pánipat in 1556 He now

1539 Humayun defeated by Sher Shah, the Afghan ruler of Bengal at Chapar Ghat, near Baxar, the Mughal army being utterly routed Retreats to Agra

1540 Humayun finally defeated by Sher Shah near kanau, and escapes to Persia as an exile Sher Shah ascends the Delhi thione

1556 Humayun's return to India, and defeat of the Afghans at Panipat by Remounts the throne, but dies in a few his young son Akbar months, and is succeeded by Akbar

For dates see Thomas Pathan Kings, pp 379, 380 Materials for Huma yun's reign Sir Henry Elliot's Persian Historians, vols iv v vi , Firishta, vol 11 pp 154-180 (1829), Elphinstone, pp 441-472 (1866)

1 Materials for reign of Akbar the Aln 1 Akbari, of Abul Fazl (old translation by Francis Gludwin, 2 vols, 1800, best edition by Professor Blochmann (Calcutta, 1873), lest unfinished at his death), Sir Henry Flinot's Persian Historians, vols 1, v and vi , Firishta, vol n pp 1812-82, Liphinstone, 495-547 (1866)

Rairam Kegent, 1556 60

Akbar reigns for himself, 1560 became the Regent for the youthful Akbar, under the honoured title of Khán Bába, equivalent to 'the King's Father' Brave and skilful as a general, but harsh and overbearing, he raised many enemies, and Akbar, having endured four years of thraldom, took advantage of a hunting-party to throw off his ministers yoke (1560). The fallen Regent, after a struggle between his loyalty and his resentment, revolted, was defeated, but pardoned. Akbar granted him a liberal pension, and Bairam was in the act of starting on a pilgrimage to Mecca, when he fell beneath the knife of an Afghan assassin, whose father he had slain in battle

Akbars work in India The chief events in the reign of Akbar are summarized below <sup>1</sup> India was seething with discordant elements. The earlier invasions by Turks, Afghans, and Mughals had left a powerful Muhammadan population in India under their own chiefs. Akbar reduced these Musalmán States to Provinces of the Delhi Empire. Many of the Hindu kings and Rajput nations had also regained their independence, Akbar brought them into political dependence to his authority. This double task he effected partly by force of arms, but in part also by

### 1 RIIC N of ALBAR, 1556 1605 -

1342 h mat I market in Sind

1,55-56 Regains the Delhi throne for his father by the great victory over the A'ghans at Panipat (Bairam Khan in actual command) Succeeds his father after a few months in 1550, under regency of Buram Khan

1500 Akbar assumes the direct management of the kingdom. Revolt of Bairain who is defeated and pardoned

1566 Invasion of the Pur ab by Akbars rival brother Hakim, who is defeated

1561-68 Akbar subjugates the Rajpat kingdoms to the Mughal I mpire 1372-73 Akbar scampaign in Gujarat, and its re annexation to the Finpire 1576 Akbar s re conquest of bensal, its final anne ation to the Mughal Empire

1581-93 Insurrection in Gujarat. The I rovince finally subjugated in 1593 to the Mughal I inpute.

1500 Akbar's conquest of Kashinir ats final revolt quelled in 1592

1592 Akbar conquest and annexation of Surl to the Mughal Impure

1594 His subjugation of Kandahar, and consolidation of the Mughal Empire over all India north of the Vindhyas as far as Kabul and Kandahar

1595 Unsuccessful expedition of Akbar's aimy to the Decean against Ahmadnagar under his son Prince Murad

1599 Second expedition against Almadnagar by Al bar in person Captures the town, but fails to establish Mughal rule

1601 Annexation of Khandesh, and return of Akbar to Northern India 1905. Akkar's death at Agra.

A' A — Such phrases as 'Akhar's conquest' or 'Akhar's campaign' mean the conquest or campaign by Al bar's armies, and do not necessarily my ly his personal presence

alliances He enlisted the Rájput princes by marriage and Concilia by a sympathetic policy in the support of his throne then employed them in high posts, and played off his Hindu generals and Hindu ministers against the Mughal party in Upper India, and against the Afghán faction in Bengal

On his accession in 1556, he found the Indian Empire confined to the Punjab, and the districts around Agra and Delhi He quickly extended it at the expense of his nearest Albar reighbours, namely, the Raiputs Jaipur was reduced to a extends fief of the Empire, and Akbar cemented his conquest by Empire marrying the daughter of its Hindu prince Jodhpur was in like manner overcome, and Akbar married his heir, Salím, who afterwards reigned under the title of Jahangir, to the grand-daughter of the Raja. The Rajputs of Chittor were overpowered after a long struggle, but disdained to mingle their Reduction high-caste Kshattriyan blood even with that of an Emperor of Rajputs 1561-68 They found shelter among the mountains and in the deserts of the Indus, whence they afterwards emerged to recover most of their old dominious, and to found their capital of Udaipur, which they retain to this day They still boast that alone, among the great Rapput clans, they never gave a daughter in marriage to a Mughal Emperor

Akbar pursued his policy of conciliation towards all the Hindu He also took care to provide a career for the lesser Employ States Hindu nobility He appointed his Hindu brother-in-law, the ment of son of the Jaipur Raja, to be Governor of the Punjab Raja Hindu's Mán Singh, also a Hindu relative, did good war-service for Akbar Man from Kábal to Orissa. He ruled as Akbar's Governor of Singh Bengal from 1589 to 1604, and again for a short time under Jahángír in 1605-06 Akbar's great finance minister, Raja Todar I odar Mall, was likewise a Hindu, and carried out the first Mall land settlement and survey of India. Out of 415 mansabdars, or commanders of horse, 51 were Hindus Akbar abolished the jasiah, or tax on non Musalmans, and placed all his subjects upon a political equality. He had the Sanskrit sacred books and epic poems translated into Persian, and showed a keen interest in the literature and religion of his Hindu subjects He respected their laws, but he put down their in-Reform of human rites He forbade trial by ordeal, animal sacrifices, Hindu customs and child marriages before the age of puberty He legalized the remarriage of Hindu widows, but he failed to abolish widow-burning on the husband's funeral pile, although he took steps to ensure that the act should be a voluntary one

Akbar thus incorporated his Hindu subjects into the

\kbar s organiza tion of the I mpire

Aimy icloims

Akbar not only subdued all India to the north of the Vindhya Mountains, he also organized it into an Empire He partitioned it into Provinces over each of which he placed a Governor, or Viceroy, with full civil and military control This control was divided into three departments—the military the judicial, including the police, and the revenue view to preventing mutinies of the troops, or assertions of independence by their leaders, he reorganized the army on a new basis He substituted, as far as possible, money payments to the soldiers for the old system of grants of land (jugirs) to the generals. Where this change could not be carried out, he brought the holders of the old military fiefs under the control of the central authority at Delhi He further checked the independence of his provincial generals by a sort of feudal organization, in which the Hindu tributary princes took their place side by side with the Mughal nobles

Akbars stem of ustice

(Mir-i-adl) at the capital aided by Kazis or law officers in the principal towns. The police in the cities were under a superintendent or ketaul, who was also a magistrate country districts where police existed at all, they were left to the management of the landholders or revenue officers But throughout rural India, no regular police force can be said to I ave existed for the protection of person and property until nd police after the establishment of British rule The Hindu village had its hereditary watchman, who in many parts of the country was taken from the predatory castes, and as often leagued with the robbers as opposed them. The landholders and revenue-officers had each their own set of myrmidons who plundered the peasantry in their names

The judicial administration was presided over by a lord justice

1kbai reverue Sts'eni

Akbar's revenue system was based on the ancient Hindu customs, and survives to this day. He first executed a survey to measure the land His officers then found out the produce of each acre of land, and settled the Covernment share, amounting to one third of the gross produce they fixed the rates at which this share of the crop might be commuted into a money payment. These processes, known as the land settlement, were at first repeated every year But to save the peasant from the extortions and vexations incident to an annual inquiry, Akbar's land settlement was afterwards made for ten years. His officers structly enforced the payment of a third of the whole produce, and Akbar's land revenue from Northern India exceeded what the British take at the present day

From his fifteen Provinces, including Kábul beyond the Afghan frontier, and Khándesh in Southern India, Akbar Akbar's demanded 14 millions sterling per annum, or excluding Kabul, land Khándesh, and Sind, 121 millions The British land tax from a much larger area of Northern India was only 113 millions in 1883 1 Allowing for the difference in area and in the purchasing power of silver, Akbar's tax was about three times the amount which the British take Two later returns show the land revenue of Akbar at 161 and 171 millions sterling His total The Provinces had also to support a local militia (búmí = revenue bhumi) in contradistinction to the regular royal army, at a cost of at least 10 millions sterling Fxcluding both Kabul and Khandesh, Akbar's demand from the soil of Northern India exceeded 22 millions sterling per annum, under the two items of land revenue and militia cess There were also a number of miscellaneous taxes Akbar's total revenue is estimated at 42 millions 2

<sup>1</sup> \amely, Bengal, £3,816,796, \ssam, £385,504 North Western Provinces and Oudh, £5,700,816, and Punjab, £1,889,807 total, £11,792,923 - Administration Reports (1882 83)

PROVINCES OF THE DEITH EMPIRE UNDER ARRAR, CIRC 1580

	L	and tax in Rupees
J	Mahabad	5,310,677
2	\ς, га,	13,656,257
,	Oudh,	5,043,954
4	Aimerc	7,153,449
5	Gujarat,	10,924 122
()	Behar	5 547,985
7	Bengal,	14,961,482
8	Delhi,	15 040,388
9	I ahore,	13,986 460
10	Vultan,	0,600,704
11	Malwa,	6,017,376
12	Berar,	17 376,117
ı,	Kh indesh	7,503 237
14	Thmadnagar (only nominally a Province, yielded no revenue),	
15	Latta (Sind),	1,656 284
16	Lotal, Kabul (omitting payments in kind),	133,835,552
	Grand Total,	141,909,576

The land revenue was returned at 101 millions sterling in 1594, and £17,450,000 at Akbar's death in 1605. The aggregate taxation of Akbar was 32 nullions sterling with 10 inillions for militia cess (bumi), total, 42 millions sterling See Thomas Resenue Resources of the Muglal Empire, pp 5-21 and p 54 (Trubner, 1571) These and the following conversions

The large totals of Mughal taxation

Since the first edition of this work was written, the author has carefully reconsidered the evidence for the large revenue totals under the Mughal Emperors The principal authority on the subject is Mr Edward Thomas, FRS, who has summed up the results of a lifetime devoted to Indian numismatics, in his Revenue Resources of the Mughal Empire from AD 1593 to AD 1707 1 No one can study that work without acknow ledging the laborious and accurate research which Mr Thomas

be relied on?

Are they to has devoted to the points involved His results were accepted without reserve in the first edition of The Imperial Gazetties Since the publication of this work, however, the author has received several communications from Mr. H. G. Keene, questioning the soundness of Mr Thomas' conclusions Those conclusions point to a comparatively heavier taxation under the Mughal Emperors than under British rule, and have been made the basis of contrasts flattering to the British administration. The author felt it therefore, incumbent on him to submit Mr Keene's views to the scrutiny of the two most eminent num sinatists now living, namely General Cunningham and Mr Edward Thomas himself

Central Canning lam -TICH

Mr Thomas, after examining the counter-statements, ad heres to his former conclusions General Cunningham is inclined to think that the great totals of revenue recorded by Muhammadan writers, could not have been actually enforced from India at the different periods to which they refer. He thinks that individual items may be reduced by a technical scrutiny. But that scrutiny only affects certain of the entries He rests his general conclusion on wider grounds, and believes that the revenues recorded by the Muhammadan writers represent rather the official demand than the amounts actually The following pages will reproduce Mr I dward Thomas conclusions, as revised by himself for the first edition of this work But they are reproduced subject to the con siderations stated in the present paragraph

are made at the nominal rate of 10 rupees to the pound sterling the actual rate was then about 8 or 9 rupces to the L. The real revenues of the Mughal Emperors repre ented, therefore, a con iderably larger sum in sterling than the amounts stated in the text and footnote chasing power of silver, expressed in the taple food grains of India, was two or three times greater than now

1 This monograph was written as a supplement to Mr. Thomas' Chrome! . of the Patnan Ames of Delhi (Trubner & Co., 1871)

See Gen\_ral Cunningham's Letter, date 1 5th July 188,, printed in the paper 'On some Copper Coms of Akbai, in the Jou nai of the A citic Society of Langel, vol liv Part 1, 1885

It may be here convenient to exhibit the revenues of the Mughal Mughal Empire in India, as compiled by Mr Edward Thomas revenues, 1697 1761 from Muhammadan authorities and European travellers, dur ng A D the century from its practical foundation by Akbar to its final expansion under Aurangzeb in 1697, and thence to its fall in 1761 -

	Mightly my rect	มเลเ	34t <sup>1</sup> 103	I ad Kevenne	Revenue from all Sources
-	Mlu, 10 1593.	1593,	No un al dia Almal a (fa all In 4a Albawa ce fa Irameral Ira),		£32,000 000 10 000,000
					11.11 £42,000,000
4 to 4 t		1594, 1605,	Otherst Documents and first India, Chieral Documents and first India ( India ) Authorities queted by the last, March 1980 and 198	" ' / 16 574,388 " ' / 10 582,440 1 '   17,450 000	030 000 03 #/#
20 v	1625, 1625, 1645,	1625, 1645, 49,	Al auf frand J th 11, mtl	// 17 500,000 // 22,000,000	
. 00	\u1 mg/cl, 1655,	1655,	Official Document,		
6	*	16703	fater Official Documents,		
2 =	: :	169 <b>5</b> , 1697,	Gemelh Cuen, Munece (Cuton), 1 n H	004 617 55 11	m/t 80,000,000 nett 77,435,800
13	., 1707, Shah Alam, 1761,	1707, 1761,	presented to Ahmad }		

Raja Todar Akbai s Hindu minister, Raja Todar Mall, conducted the mevenue settlement, and his name is still a household word Abul Fizi among the husbandmen of Bengal Abul Fizi, the man of letters and Finance Minister of Akbar, compiled a Statistical Survey of the Empire, together with many vivid pictures of his master's court and daily life, in the Ain-i-Akbari—a work of perennial interest, and one which has proved of great value in carrying out the Statistical Survey of India at the present day Abul I azl was killed in 1602, at the instigation of Prince Salim, the heir to the throne

lah ingu I mpero , 1005-27 SAIIM the favourite son of Akbar, succeeded his father in 1605, and juled until 1627 under the title of Jahangir, or Conqueror of the World The chief events of his reign are summarized below? His reign of twenty-two years was spent in reducing the rebellions of his sons, in exalting the influence

'The old translation is by Glalwin 1800—the best is by the late Mr I sochmann, Principal of the Calcutta Mad anal, or Muhammadan college, whose early death was one of the sicritest loses which Persian scholarship has sustained in this century

### 2 KEICN OF JAHANCIK 1005-27 --

1605 Accession of Jahai gii

1606 1 light repellion, and imprisonment of his eldest sen, Khusi i

1010 Malik Ambar recovers Ahmadua, at from the Mughals, and reasserts in 'ependence of the Decean dynasty, with its new capital of Auran, ahad

1011 Jahangir's mailinge with Nur Jahan

1012 Jahangir again defeated by Mahk Ambar in an attempt to recover Ahmadnagar

1613 14 Defeat of the Udaipur Raja by Jahan an Shah Jahan Unsuccessful revolt in Kabul against Jahan in

1615 Lmbassy of Sir T Roe to the Court of Johangii

1616 17 Temporary re con uest of Ahmadnagar by Johnagus som Slah Jahan

1621 Renewed disturbances in the Decran, ending in treaty with 5h h. Jahan Capture of Kandahar from Jahangir's troops by the Persians

1623-25 Rebellion against Jahangir by his son Shah Jihan, who after defeating the Governor of Bengal it Kajin dai', seized that Province and Behar, but was himself overthrown by Mahabat Khan, his father's general, and sought refuge in the Decean, where he unites with his oid opponent Mahk Ambar

1026 The successful general Mahabat Ishan seizes the person of Jahangir Intrigues of the Impress Nur Jahan

1027 Jahangir recovers his liberty, and sends Malabat Khin against Shah Jahan in the Decean. Mahabat joins the rebel prince against the Limperor Jahang r

1627 Death of Jahanger

Ma erials for Jahangir's reign Sir Henry Hillat's Persian Historians,

of his wife, and in drunken self-indulgence In spite of long wars in the Deccan, he added little to his father's territories India south of the Vindhyas still continued apart from the northern Empire of Delhi Malik Ambar, the Abyssinian minister of Ahmadnagar, maintained, in spite of reverses, the independence of that kingdom. At the end of Jahángir's Repellion reign, his rebel son, Prince Sháh Jahán, was a refugee in the of his son Deccan, in alliance with Malik Ambar against the Mughal troops The Rajputs also began to re-assert their independence In 1614, Prince Sháh Jahan on behalf of the Emperor defeated the Udaipur Rájá But the conquest was only partial and for a time Meanwhile, the Rajputs formed an Revolt important contingent of the imperial armies, and 5000 of of the their cavalry aided Shan Jahan to put down a revolt in Kabul Rajputs The Afghan Province of Kandahar was wrested from Jahangir by the Persians in 1621 The land-tax of the Mughal Empire remained at 171 millions under Jahangir, but his total revenues were estimated at 50 millions sterling 1

The principal figure in Jahangir's reign is his Empress, Nur The Fm Jahan,2 the Light of the World Born in great poverty but press vur of a noble Persian family, her beauty won the love of Jahangir while they were both in their first youth, during the reign of Akbar The old Emperor tried to put her out of his son's way, by marrying her to a brave soldier who obtained high employment in Bengal Jahangir on his accession to the throne commanded her divorce. Her husband refused, and was killed. His wife, being brought into the imperial palace, lived for some time in chaste seclusion as his widow, but in the end emerged as Nur Jahan, the Light of the World surrounded herself with her relatives and at first influenced Jahangir for his good. But the jealousy of the imperial princes and of the Mughal generals against her party led to intrigue and rebellion. In 1626, her successful general, Mahabat Khan found himself compelled in self-defence, to turn against her. He seized the Emperor, whom he kept, together with Nur Jahan, in cuptivity for six months. Jahangir died in the following year, 1627 in the midst of a rebellion against him by his son 5h th Juhan and his greatest general, Mahabu Khun

Jahángir's personal character is vividly portrayed by Sir Jahangir's Thomas Roc, the first British Ambassador to India (1615) Personal character

Otherwise known is Nur Mahal the Light of the Palace

<sup>1</sup> Mr I dward Thomas Recentle Resources of the Mushal Empire, pp 21-26 and p 54

His drunken feasts

Agra continued to be the central seat of the government, but the imperial army on the march formed in itself a splendid capital Jahangir thought that Akbar had too openly severed himself from the Muhammadan faith The new Emperor conformed more strictly to outward observances, but lacked the inward religious feeling of his father While he forbade the use of wine to his subjects, he spent his own nights in drunken revelry He talked religion over his cups until he reached a certain stage of intoxication, when he 'fell to weeping, and to various passions, which kept them to midnight' In public he maintained a strict appearance of virtue, and never allowed any person whose breath smelled of wine to enter his presence A courtier who had shared his midnight revels, and indiscreetly referred to them next morning, was gravely examined as to who were the companions of his debauch, and one of them was bastinadoed so that he died

Jahang i s justice During the day time, when sober, Jahangir tried to work wisely for his Empire. A chain hung down from the citadel to the ground, and communicated with a cluster of golden bells in his own chamber, so that every suitor might apprise the Emperor of his demand for justice without the intervention of the courtiers. Many Furopean adventurers repaired to his court, and Jahangir patronized alike their arts and their religion. In his earlier years he had accepted the eclectic faith of his father. It is said that on his accession he had even permitted the divine honours paid to Akbar to be continued to himself. His first wife was a Hindu princess figures of Christ and the Virgin Mary adorned his rosary, and two of his nephews embraced Christianity with his full

His religion

Shah Jahan hurried north from the Deccan in 1627, and proclaimed himself Emperor at Agra in January 1628 He

Shah Lian, Lm,eler, 1628-58 approval 1

 $^{1}$  Flphinstone's  $H\!\!/\!\!\!/ t$  , p 560 cel 1866,, on the authority of Kot, Hawkins, Terry, Coryat

<sup>2</sup> Materials for Shah Jahan's reign Sir Henry I thot's Persian His torians vols vi vii and viii Liphinstone, pp 574-603

## RFIGN OF SHAH JAHAN, 1628 58 -

1627 Imprisonment of Nur Jahan on the death of Jahan ir, by Asaf Khan on behalf of Shah Jahan

1925 Sich Jahan returns from the Decem and ascends the throne (January). He murders his brother and kinsmen

1625 30 Mghan uprisings against Shah Jalian in Northern India and in the Decean

[I oolnote continue I on next fage

put down for ever the court faction of the Empress Núr Jahán. by confining her to private life upon a liberal allowance, and by murdering his brother Shahriyar, with all members of the house of Akbar who might prove rivals to the throne He was. however, just to his people, blameless in his private habits, a good financier, and as economical as a magnificent court, splendid public works, and distant military expeditions could permit

Under Shah Jahán, the Mughal Fmpire was finally shorn of Shah its Afghan Province of Kandahar, but it extended its con-Jahan quests in the Deccan, and raised the magnificent buildings in Kandahar, Northern India which now form its most splendid memorials finally in After a temporary occupation of Balkh, and the actual re-conquest of Kandahar by the Delhi troops in 1637, Shah Jahan lost much of his Afghán territories, and the Province of Kandahar was severed from the Mughal Empire by the Persians in 1653 On the other hand, in the Deccan, the kingdom of Ahmadnagar (to which Ellichpur had been united in 1572) was at last annexed to the Mughal Empire in 1636 Bidar fort was taken in 1657, while the remaining two of the Conquests five Muhammadan kingdoms of Southern India,1 namely in the Deccan Bijapur and Golconda, were forced to pay tribute, although not finally reduced until the succeeding reign of Aurangzeb But the Marathas now appear on the scene, and commenced,

1629-35 Shah Jahan's wars in the Deccan with Ahmadnagar and Billion . unsuccessful siege of Bijapur

1634 Shahu Bhonsla grandfather of Swap, the founder of the Maratha power, attempts to restore the independent King of Ahmadnagar, but fails and in 1636 makes peace with the Emperor Shah Jahan

1636 Buapur and Golconda agree to pay tribute to Shah Jahan Final submission of Ahmadnagar to the Mughal Empire

1637 Re conquest of Kandahar by Shah Jahan from the Persians

1645 Invasion and temporary conquest of Balkh by Shah Jahan Balkh was abandoned two years later

1647 5. Kandahar again taken by the Persians, and three unsuccessful attempts made by the Emperor's son, Aurangzeb and Dara to recap ture it Kandahar finally lost to the Mughal Empire, 1653

1655-56 Renewal of the war in the Deccan under Prince Aurangzeb His attack on Haidarabad, and temporary submission of the Golconda king to the Mughal Empire

1656 Renewed campugn of Shah Jahan's armies against Bijapur

1057-58 Dispute as to the succession between the Emperor's sons Aurangzeb defeats Dara, imprisons Murad, his other brother, deposes his father by confining him in his palace, and openly assumes the government Shih Jahan dies, practically a State prisoner in the fort of Agra, in 1666

1 Vide ante, end of chap x

unsuccessfully at Ahmadnagar in 1637, that series of persistent Hindu attacks which were destined in the next century to break down the Mughal Empire

Aurangzeb and his brothers carried on the wars in Southern

Shah Jahan's buildings

India and in Afghanistan for their father, Shah Jahan Save for one or two expeditions, the Emperor lived a mag nificent life in the north of India. At Agra he raised the Taj Mahal, exquisite mausoleum of the Taj Mahal, a dream in marble, designed by Titans and finished by jewellers 1 Mosque, the Moti Masjul, within the Agra fort is perhaps the purest and loveliest house of priver in the world. Not content with enriching his grandfuther Akbar's capital, Agra, with these and other architectural glories, he planned the re transfer of the seat of Government to Delhi, and adorned that city with buildings of unrivalled magnificence Its Great Mosque, or Jama Maspid, was commenced in the fourth year of his reign and completed in the tenth. The palace at Delhi, now the fort, covered a vast parallelogram, 1600 feet by 3200 with exquisite and sumptuous buildings in marble and fine stone A deeply-recessed portal leads into a vaulted hall, rising two storeys like the nave of a gigantic Gothic cathedral, 375 feet in length, 'the noblest entrance,' says the historian of archi tecture, 'to any existing palace'2 The Dinan i Khas, or Court of Private Audience, overlooks the river, a masterpiece of delicate inlaid work and poetic design. Shih Jahan spent many years of his reign at Delhi, and prepared the city for its destiny as the most magnificent capital in the world under his successor Aurangzeb. But exquisite as air its public buildings, the manly vigour of Akhar's red stone fort at Agra, with its bold sculptures and square Hindu construction, has given place to a certain efferminate beauty in the marble structures of Shah Tahan

Delhi Mosque

Shah Jahan's palace at Delhi

> 1 Shah Jahan's architectural works are admir the decembed in Dr James Fergusson's Hist Architecture, vol ni pp 559 602 et 1876 See also article AGRA CITY, The Imperial Ga ett er et India

> \* Fergusson's Hist Architecture, vol m 1 502 See also unicle DLLIST ( 183, The Imperial Gazettee) of India

Provinces of the Derill I will a continual lates, 1648 AG

In India-	Land tax in Kupe
1 Della,	25,000 000
2 Agra,	22,500,000
3 Lahore,	22 500,000
4 lymere,	15,000,000
	annua at against their an
Carry for	ward, 55,000,000

Akbar's dynasty lay under the curse of rebellious sons As Rebellion Jahángír had risen against his most loving father, Akbar, and of Prince as Sháh Jahán had mutinied against Jahángír, so Sháh Jahán zeb, 1657 in his turn suffered from the intrigues and rebellions of his family. In 1658, Shah Jahán, old and worn out, fell ill, and in the following year his son Aurangzeb, after a treacherous conflict with his brethren, deposed his father, and proclaimed Shah himself Emperor in his stead. The unhappy Shah Jahán was Jahan himself Emperor in his stead. The unhappy Shah Jahán was Jahan himself Emperor in his stead. The unhappy Shah Jahán was Jahan himself Emperor in his stead. The unhappy Shah Jahán was Jahan himself Emperor in his stead.

Under Sháh Jahán, the Mughal Empire attained its highest union of strength with magnificence. His son Aurangzeb added to its extent, but at the same time sowed the seeds of its decay. Akbar's land revenue of 17½ millions had Shah been raised, chiefly by new conquests, to 22 millions sterling Jahan but this sum included Kashmir, and five Provinces in Afghanistán, some of which were lost during Sháh Jahan's reign. The land revenue of the Mughal Empire within India, under Shah Jahán, was 20¾ millions. The magnificence of Sháh Jahán's court was the wonder of European travellers. His Peacock Throne, with its tail blazing in the shifting natural colours of rubies, sapphires, and emeralds, was valued by the jeweller Lavernier at 6¼ millions sterling.

	Brought forward,	Rs	85,000,000
5	Daulatabad,		13 750,000
6	l'erar,		13,750,000
7	Ahmadabad,		13,250,000
8	Bengal,		12,500,000
9	Allahabad,		10,000 000
10	Behar,		10 000,000
11	Malwa,		10,000,000
12	Khandesh,		10,000,000
13	Oudh,		7,500,000
14	Telingana,		7 500,000
15	Multan,		7 000 000
16	Orissa,		5 000 000
17	latta (Sind),		2,000 000
18	Baglanah,		500,000
	Land Revenue of India,		207,750,000
19	Kashmir,		3 750,000
20	Labul,		4 000,000
21	Balkh,		2,000,000
22	Kandahar,		1,500,000
23	brdrkhshan,		1,000,000

Total Rs 220,000,000

<sup>-</sup> Mr Edward Thomas Revenue Resources of the Mughal Empire p 28
VOL. VI

Aurangzel) s usurpa

AURANGZEB proclaimed himself Emperor in 1658, in the room of his imprisoned father, with the title of Alamgir, the tion, 1658 Conqueror of the Universe, and reigned until 1707 Under Aurangzeb, the Mughal Empire reached its widest limits 1 But his long rule of forty nine years merely presents on a more magnificent stage the old unhappy type of a Mughal In its personal character, it commenced with his His reign, reign 1658-1707 rebellion against his father, consolidated itself by the murder of his brethren, and darkened to a close amid the mutinies, intrigues, and gloomy jealousies of his own sons. Its public aspects consisted of a magnificent court in Northern India, conquests of the independent Muhammadan kings in the south, and wars against the Hindu powers, which, alike in Rajputána and the Deccan, were gathering strength for the overthrow of the Mughal Empire

> The chief events of the reign of Aurangzeb are summarized below 2 The year after his accession, he defeated and put to death his eldest brother, the noble but impetuous Dara

> 1 Materials for Aurangzeb's reign Sil Henry Elliot's Ter vian Historians, vols vii and viii , Elphinstone, pp 598-673

### 2 REICN OF ALRANGZEB, 1658 1707 -

1058 Depos tion of Shah Jahan, and usurpation of Aurangach

1059 Amangzeb defeats his brothers Shuja and Dara. Dara, his flight eing betrayed by a chief with whom he sought refuze, is put to death by order of Aurangzeb

1660 Continued struggle of Aurangach with his brother Shuja, who ultimately fled to Arakan, and there perished miserably

1661 Aura igzeb execute his youngest brother, Murid, in prison

1002 Unsuccessful invasion of Assam by Aurangich's general Mir Jumla Di turbances in the Decem With between Bit your and the Marathas ander Swap. After various changes of fortun., Swap, the founder of the Maratha power, retains a considerable territory

1652-1665 Swap in rebellion against the Mughal I music. In 1664 he assumed the title of Raja, and asserted his macy endence, but in 1665 on a large army Long sent against hun, he made submission, and proceeded to Delhi, where he was placed under restraint, but soon afterwards escaped

1666 Death of the deposed Emperor, Stah Jahan War in the Decean, and defeat of the Mughals by the King of Lyapur

1667 Swap makes peace on favourable terms with lurangeds, and obtains an extension of territory. Six yi leves tribute from lagarar and

1670 Sivan ravages Khandesh and the Decean, and there levies for the first time chauth, or a contribution of one fourth of the revenue

1672 Defeat of the Mughals by the Maratha Sivan

1677 Aurangieb revives the juntan in foll tix on non Muhammadans [Icotnote continue I on next face (1659) After another twelve months' struggle, he drove out of He mur India his second brother, the self-indulgent Shuja, who perished ders his miserably among the insolent savages of Arakan (1660-61) 1 brothers His remaining brother, the brave young Murad, was executed in prison the following year (1661) Aurangzeb, having thus killed off his brethren, set up as an orthodox sovereign of the strictest sect of Islam, while his invalid father, Shah Jahan, lingered on in prison, mourning over his murdered sons, until 1666, when he died

Aurangzeb continued, as Emperor, that persistent policy of Subjuga the subjugation of Southern India which he had so brilliantly Southern commenced as the lieutenant of his father, Shah Jahán the five Muhammadan kingdoms of the Deccan, three, namely Bidar, and Ahmadnagar with-Elichpur, had fallen to Aurangzeb's arms before his accession to the Delhi throne 2 The two others, Bnápur and Golconda, struggled longer, but Aurangzeb was determined at any cost to annex them to the Mughal Empire During the first half of his reign, or exactly twenty-five years, he waged war in the south by means of his generals (1658-83) A new Hindu power Rise of the had arisen in the Deccan, the Marathás 3 The task before Maratha Aurangzeb's armies was not only the old one of subduing power the Muhammadan kingdoms of Bijapur and Golconda,

1679 Aurangzeb at war with the Rajputs Rebellion of Prince Akbar, Aurangzeb's youngest son, who joins the Rajputs, but whose army deserts him Prince Akbar is forced to fly to the Marathas

1681 Aurangzel has to continue the war with the Raiputs

[1672-1680 Maratha progress in the Deccan Sivaji crowns himself an independent sovereign at Raigarh in 1674 His wars with Bijapur and the Mughals Sivaji dies in 1680, and is succeeded by his son, Sambhan ]

1683 Aurangzeb invades the Deccan in person, at the head of his Grand

1686-88 Aurangleb conquers Byapur and Golconda, and annexes them to the Empire (1688)

1689 Aurangzeb captures Sambhan, and barbarously puts him to

1692 Guerilla war with the Marathas under independent leaders

1698 Aurangzeb captures Jinji from the Marathas

1099-1701 The Maratha war Capture of Satara and Maratha forts by the Mughals under Aurangzeb Apparent rum of Marathas

1702-05 Successes of the Marathas

1706 Aurangzeb retreats to Ahmadnagar, and

1707 Miserably dies there (February)

1 See article Akyab, The Imperial Gazett er of India

<sup>2</sup> The five kingdoms have been described in chapter x

8 For the rise and history of the Muathus, see next chapter, an

but also of crushing the quick growth of the Marátha confederacy

During a quarter of a century his efforts failed Byápur and Golconda were not conquered In 1670, the Maratha leader, Swajf, levied chauth, or one fourth of the revenues, as tribute from the Mughal Provinces in Southern India, and in 1674. enthroned himself an independent sovereign at Raigarh 1680-81, Aurangzebs rebel son, Prince Akbar, gave the prestige of his presence to the Marátha army Aurangzeb felt that he must either give up his magnificent life in the north for a soldier's lot in the Deccan, or he must relinquish his most cherished scheme of conquering Southern India He accordingly prepared an expedition on an unrivalled scale of numbers and splendour to be led by himself arrived at the head of his Grand Army in the Deccan, and spent the next half of his reign, or twenty four years, in the Golconda and Byápur fell after another long struggle, and were finally annexed to the Mughal Empire in 1688

Aurang zeb s southern

campaign, 1683 1707

Sivaji crowns

himself

His 20 years' Maratha war,

1688 1707

madan kingdoms of the Deccan only left the arena bare for the Marathás Indeed, the attacks of the Maráthas on the two Muhammadan States had prepared the way for the annexa tion of Jhose States by Aurangzeb The Fmperor waged was during the remaining twenty years of his life (1688-1707) against the rising Hindu power of the Maráthas great leader, Swají, had proclaimed himself king in 1674, and died in 1680 Aurangzeb captured his son and successor Sambhají in 1689, and cruelly put him to death, seized the Marátha capital, with many of their forts, and seemed in the first year of the new century to have almost stamped out their existence (1701) But after a guerilla warfare, the Maráthás again sprang up into a vast fighting nation. In 1705 they recovered their forts, while Aurangzeb had exhausted his health, his treasures, and his troops, in the long and fruitless struggle

His soldiery murmured for arrears, and the Emperor, now old and peevish, told the malcontents that if they did not like his service they might quit it, while he disbanded some of his

But the conquests of these two last of the five Muham-

His Grand Army worn out, 1705

Meanwhile the Marathás were pressing hungrily on the imperial camp. The Grand Army of Aurangzeb had grown during a quarter of a century into an unwieldy capital. Its movements were slow, and incapable of concerlment. If Aurangzeb sent out a rapid small expedition against the Marathás who plundered and insulted the outskirts of his camp.

cavalry to ease his finances

Aurangzch h mmed they cut it to pieces If he moved out against them in force. they vanished His own soldiery feasted with the enemy, who prayed with mock ejaculations for the health of the Emperor as their best friend In 1706, the Grand Army was so disor- His ganized that Aurangzeb opened negotiations with the Mar-despur, áthas He even thought of submitting the Mughal Provinces to their tribute or chauth But their insolent exultation broke off the treaty, and the despairing Aurangzeb, in 1706, sought shelter in Ahmadnagar, where he died the next year suspicion of his sons' loyalty, and just fears lest they should subject him to the fite which he had inflicted on his own father. left him alone in his last days On the approach of death, he Aurang gave utterance in broken sentences to his worldly counsels zeb's death, and adieus, mingled with terror and remorse, and closing 1707 in an agony of desperate resignation 'Come what may, I have launched my vessel on the waves Farewell! Farewell! Farewell 1'1

The conquest of Southern India was the one inflexible purpose of Aurangzeb's life, and has therefore been dealt with here in a continuous narrative. In the north of India, great events had also transpired Mir Jumla led the imperial Mir troops as far as Assam, the extreme eastern Province of Jumla's India (1662) But amid the pestilential swamps of the rainy to Assam, season, the army melted away, its supplies were cut off, and 1662 its march was harassed by swarms of natives who knew the country and defied the climate Mir Jumlá succeeded in extricating the main body of his troops, but died of exhaustion and a broken heart before he reached Dacca.

In the west of India, Aurangzeb was not more fortunate During his time the Sikhs were growing into a power, but it was not till the succeeding reigns that they commenced the series of operations which in the end wrested the Punjab from the Mughal Empire Aurangzeb's bigotry arraved Aurang against him the Hindu princes and peoples of Northern India zebs He revived the *jaziah* or insulting poll-tax on non-Musalmans policy (1677), drove the Hindus out of the administration, and Oppresses oppressed the widow and children of his father's faithful the Hindus Hindu general Jaswant Singh A local sect of Hindus was forced into rebellion in 1676, and in 1677, the Rajput States The Raj combined against him The Emperor waged a protracted war puts revolt,

<sup>1</sup> Aurangzeh's Letters form a popular Persian book in India to this day His counsels to his sons are edifying and most pathetic and the whole work is written in a deeply religious tone, which could scarcely have been as-umcd

against them, at one time devastating Rájputana, at another time saving himself and his army from extermination only by a stroke of genius and rare presence of mind. In 1679, his son, Prince Akbar, rebelled and joined the Rájputs with his division of the Mughal army From that year, the permanent alienation of the Ráiputs from the Mughal Empire dates, and the Hindu chivalry, which had been a source of strength to Akbar the Great, became an element of ruin to Aurangzeb and his The Emperor sacked and slaughtered throughout the Ráiput States of Jaipur, Jodhpur, and Udaipur Raiputs retaliated by ravaging the Muhammadan Provinces of Málwá, defacing the mosques, insulting the ministers of Islam, and burning the Kuran In 1681, the Emperor patched up a peace in order to allow him to lead the Grand Army into the Deccan, from which he was destined never to return

and can not be subdued

Aurang zeb s revenues

The land revenue, 30 to 38 millions

All Northern India except Assam, and the greater part of Southern India, paid revenue to Aurangzeb Provinces covered nearly as large an area as the British Empire at the present day, although their dependence on the central Government was less direct From these Provinces his net land-revenue demand is returned at 30 to 38 millions sterling, a sum which represented at least three times the purchasing power of the land revenue of British India at the present day But it is doubtful whether the enormous demand of 38 millions was fully realized during any series of years, even at the height of Aurangzeb's power before he left Delhi for his long southern wars estimated at only 30 millions in the last year of his reign, after his absence of a quarter of a century in the Deccan Fiscal oppressions led to evasions and revolts, while some or other of the Provinces were always in open war against the Emperor

Maximum Mughal land tax The following statements exhibit the Mughal Impire in its final development, just before it began to break up. The standard return of Aurangzeb's land revenue was net £34,505,890, and this remained the nominal demand in the accounts of the central exchequer during the next half-century, notwith standing that the Empire had fallen to pieces. When the Afghán invader, Ahmad Sháh Duraní, entered Delhi in 1761, the treasury officers presented him with a statement showing the land revenue of the Empire at £34,506,640. The highest land revenue of Aurangzeb, after his annexations in Southern India, and before his final reverses, was 38½ millions sterling.

of which close on 38 millions were from Indian Provinces 1 Highest The total revenue of Aurangzeb was estimated in 1695 at 80 total revenue, 80 millions, and in 1607 at 77<sup>1</sup> millions sterling<sup>2</sup> The gross millions. taxation levied from British India, deducting the opium excise, 1695 which is paid by the Chinese consumer, averaged 35½ millions sterling during the ten years ending 1879, and 403 millions from 1879 to 1883 The table on a previous page, showing the growth of the revenues of the Mughal Empire from Akbar to Aurangzeb, may be contrasted with the taxation of British India, as given in chapter xv

<sup>1</sup> Provinces	ΩF	THE	DELHI	EMPIRE	UNDER	AURANGZEB
TWOATHCES	OI.	1111			OHDIK	TIOTHIODON

LAND REVENUE OF AURANGZEB IN 1697 (according to Manucci)   Rupees   I Delhi, 12,550,000   2 Agra, 22,203,550   3 Lahore, 23,305,000   4 Almere, 21,900,002   4 Allahabad, 11,413,581   5 Punjab, 20,653,302   6 Malwa, 9,906,250   7 Behar, 12,150,000   8 Multan, 5,025,000   9 Behar, 12,150,000   9 Behar, 15,196,228   10 Ortssa, 5,707,500   11 Daulatabad, 22,873,627   12 Allahabad, 7,738,000   10 Bakar, 15,000,000   10 Baginan, 16,204,750   13 Berar, 15,350,625   14 Berar, 15,807,500   15 Bidar, 9,324,359   16 Baginan, 6,885,000   17 Nande (Nandaii), 7,200,000   18 Bengal, 40,000,000   19 Bijapur, 20,905,000   20 Rajmahal, 10,050,000   20 Colconda, 50,000,000   20 Kashmir, 5,747,734   20 Kashmir,		<sup>1</sup> Provinces of	THE DELHI	RE UNDFR AURA	ANGZEB	
Rupees   R	LAND REVENUE OF AURANGZEB			LAND REVENUE OF AURANGZEB		
I Delhi,         12,550,000         I Delhi,         30,548,753           2 Agra,         22,203,550         2 Agra,         28,669,003           3 Lahore,         23,305,000         3 Ajmere,         16,308,634           4 Ajmere,         21,900,002         4 Allahabad,         11,413,581           5 Gujurat,         23,395,000         5 Punjah,         20,653,302           6 Malwa,         9,906,250         6 Oudh,         8,058,195           7 Behar,         12,150,000         7 Multan,         5,361,073           8 Multan,         5,025,000         9 Behar,         15,196,228           9 Tatta (Suid),         6,002,000         9 Behar,         10,179,025           10 Bakar,         2,400,000         10 Sind,         2,295,420           11 Orussa,         5,707,500         11 Daulatabad,         25,873,627           12 Allahabad,         7,738,000         12 Malwa,         10,097,541           13 Deccan,         16,204,750         13 Berar,         15,350,625           14 Berar,         15,807,500         14 Khandesh,         11,215,750           15 Bidar,         9,324,359         16 Bengal,         13,115,906           17 Nande (Nandui),         7,200,000         17 Orussa,	IN 1697 (according to Manucci)			in 1707 (according to Ramusio)		
2 Agra, 22,203,550 2 Agra, 28,669,003 3 Lahore, 23,305,000 3 Ajmere, 16,308,634 4 Ajmere, 21,900,002 4 Allahabad, 11,413,581 5 Gujurat, 23,395,000 5 Punjab, 20,653,302 6 Malwa, 9,906,250 6 Oudh, 8,058,195 7 Behar, 12,150,000 7 Multan, 5,361,073 8 Multan, 5,025,000 9 Behar, 15,196,228 9 Tatta (Suid), 6,002,000 10 Sind, 2,295,420 11 Orussa, 5,707,500 11 Daulatabad, 25,873,627 12 Allahabad, 7,738,000 12 Malwa, 10,097,541 13 Deccan, 16,204,750 13 Berar, 15,350,625 14 Berar, 15,807,500 14 Khandesh, 11,215,750 15 Khandesh, 11,105,000 15 Bidar, 9,324,359 16 Bagluna, 6,885,000 16 Bengal, 13,115 906 17 Nande (Nandan), 7,200,000 17 Orussa, 3,570,500 18 Bengal, 40,000,000 18 Haidarabad, 27,834,000 19 Ujjain, 20,000,000 19 Bijapur, 26,957,625 20 Rajmahal, 10,050,000 21 Bijapur, 50,000,000 22 Golconda, 50 000,000 23 Kashmir, 5,747,7-4 24 Kabul, 4,025,985			Rupees			Rupees
3 Lahore, 23,305,000 3 Ajmere, 16,308,634 4 Ajmere, 21,900,002 4 Allahabad, 11,413,581 5 Gujurat, 23,395,000 5 Punjab, 20,653,302 6 Malwa, 9,906,250 6 Oudh, 8,058,195 7 Behar, 12,150,000 7 Multan, 5,361,07, 8 Multan, 5,025,000 8 Gujarat, 15,196,228 9 Tatta (Suid), 6,002,000 9 Behar, 10,179,025 10 Bakar, 2,400,000 10 Sind, 2,295,420 11 Ortissa, 5,707,500 11 Daulatabad, 25,873,627 12 Allahabad, 7,738,000 12 Malwa, 10,097,541 13 Deccan, 16,204,750 13 Berar, 15,350,625 14 Berar, 15,807,500 14 Khandesh, 11,215,750 15 Khandesh, 11,105,000 15 Bidar, 9,324,359 16 Baglana, 6,885,000 16 Bengal, 13,115 906 17 Nande (Nandau), 7,200,000 17 Ortissa, 3,570,500 18 Bengal, 40,000,000 18 Haidarabad, 27,834,000 19 Ujjain, 20,000,000 19 Bijapur, 26,957,625 20 Rajmahal, 10,050,000 21 Bijapur, 50,000,000 22 Golconda, 50 000,000 23 Kashmir, 5,747,7-4 24 Kabul, 4,025,985	I	Delhı,	12,550,000	1	Delhı,	30,548,753
4 Ajmere, 21,900,002 4 Allahabad, 11,413,581 5 Gujarat, 23,395,000 5 Punjab, 20,653,302 6 Malwa, 9,906,250 6 Oudh, 8,058,195 7 Behar, 12,150,000 7 Multan, 5,361,073 8 Multan, 5,025,000 8 Gujarat, 15,196,228 9 Tatta (Sind), 6,002,000 9 Behar, 10,179,025 10 Bakar, 2,400,000 10 Sind, 2,295,420 11 Orissa, 5,707,500 11 Daulatabad, 25,873,627 12 Allahabad, 7,738,000 12 Malwa, 10,097,541 13 Deccan, 16,204,750 13 Berar, 15,350,625 14 Berar, 15,807,500 14 Khandesh, 11,215,750 15 Khandesh, 11,105,000 16 Baglina, 6,885,000 16 Bengal, 13,115,906 17 Nande (Nandan), 7,200,000 17 Orissa, 3,570,500 18 Bengal, 40,000,000 17 Orissa, 3,570,500 18 Bengal, 40,000,000 19 Bijapur, 26,957,625 20 Rajmahal, 10,050,000 20 Rajmahal, 10,050,000 20 Kashmir, 50,000,000 20 Kashmir, 50,000,000 20 Kashmir, 5,747,754 21 Kabul, 4,025,985	2	Agra,	22,203,550	2	Agra,	28,669,003
5 Gujarat,         23,395,000         5 Punjab,         20,653,302           6 Malwa,         9,906,250         6 Oudh,         8,058,195           7 Behar,         12,150,000         7 Multan,         5,361,075           8 Multan,         5,025,000         8 Gujarat,         15,196,228           9 Tatta (Sind),         6,002,000         9 Behar,         10,179,025           10 Bakar,         2,400,000         10 Sind,         2,295,420           11 Ortssa,         5,707,500         11 Daulatabad,         25,873,627           12 Allahabad,         7,738,000         12 Malwa,         10,097,541           13 Deccan,         16,204,750         13 Berar,         15,350,625           14 Berar,         15,807,500         14 Khandesh,         11,215,750           15 Baghana,         6,885,000         15 Bidar,         9,324,359           16 Bengal,         13,115 906         17 Orissa,         3,570,500           18 Bengal,         40,000,000         17 Orissa,         3,570,500           19 Ujjain,         20,000,000         19 Bijapur,         26,957,625           20 Rajmahal,         10,050,000         20 Kashmir,         5,747,754           21 Kabul,         4,025,985	3	Lahore,	23,305,000	3	Ajmere,	
6 Malwa, 9,906,250 6 Oudh, 8,058,195 7 Behar, 12,150,000 7 Multan, 5,361,073 8 Multan, 5,025,000 8 Gujarat, 15,196,228 9 Tatta (Sind), 6,002,000 9 Behar, 10,179,025 10 Bakar, 2,400,000 10 Sind, 2,295,420 11 Ortssa, 5,707,500 11 Daulatabad, 25,873,627 12 Allahabud, 7,738,000 12 Malwa, 10,097,541 13 Deccan, 16,204,750 13 Berar, 15,350,625 14 Berar, 15,807,500 14 Khandesh, 11,215,750 15 Khandesh, 11,105,000 15 Bidar, 9,324,359 16 Baglina, 6,885,000 16 Bengal, 13,115,906 17 Nande (Nandan), 7,200,000 17 Ortssa, 3,570,500 18 Bengal, 40,000,000 18 Haidarabad, 27,834,000 19 Ujjain, 20,000,000 19 Bijapur, 26,957,625 20 Rajmahal, 10,050,000 21 Bijapur, 50,000,000 22 Golconda, 50,000,000 23 Kashmir, 5,747,754 24 Kabul, 4,025,985	4	Ajmere,	21,900,002	4	Allahabad,	11,413,581
7 Behar, 12,150,000 7 Multan, 5,361,073 8 Multan, 5,025,000 8 Gujarat, 15,196,228 9 Tatta (Sind), 6,002,000 9 Behar, 10,179,025 10 Bakar, 2,400,000 10 Sind, 2,295,420 11 Orissa, 5,707,500 11 Daulatabad, 25,873,627 12 Allahabid, 7,738,000 12 Malwa, 10,097,541 13 Deccan, 16,204,750 13 Berar, 15,350,625 14 Berar, 15,807,500 14 Khandesh, 11,215,750 15 Khandesh, 11,105,000 15 Bidar, 9,324,359 16 Baglina, 6,885,000 16 Bengal, 13,115,906 17 Nande (Nandui), 7,200,000 17 Orissa, 3,570,500 18 Bengal, 40,000,000 18 Haidarabad, 27,834,000 19 Ujjain, 20,000,000 19 Bijapur, 26,957,625 20 Rajmahal, 10,050,000 20 Rajmahal, 10,050,000 20 Kajmahal, 10,050,000 20 Kashmir, 50,000,000 20 Kashmir, 50,000,000 20 Kashmir, 5,747,754 21 Kabul, 4,025,985	5	Gujarat,	23,395,000	5	Punjab,	
8 Multan,       5,025,000       8 Gujarat,       15,196,228         9 Tatta (Sind),       6,002,000       9 Behar,       10,179,025         10 Bakar,       2,400,000       10 Sind,       2,295,420         11 Orissa,       5,707,500       11 Daulatabad,       25,873,627         12 Allahabud,       7,738,000       12 Malwa,       10,097,541         13 Deccan,       16,204,750       13 Berar,       15,350,625         14 Berar,       15,807,500       14 Khandesh,       11,215,750         15 Khandesh,       11,105,000       15 Bidar,       9,324,359         16 Baghna,       6,885,000       16 Bengal,       13,115 906         17 Nande (Nandun),       7,200,000       17 Orissa,       3,570,500         18 Bengal,       40,000,000       18 Haidarabad,       27,834,000         19 Ujjain,       20,000,000       19 Bijapur,       26,957,625         20 Rajmahal,       10,050,000       10 Kashmir,       5,747,754         21 Kabul,       4,025,985	6			6	Oudh,	
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10 Bakar,       2,400,000       10 Sind,       2,295,420         11 Orissa,       5,707,500       11 Daulatabad,       25,873,627         12 Allahabid,       7,738,000       12 Malwa,       10,097,541         13 Deccan,       16,204,750       13 Berar,       15,350,625         14 Berar,       15,807,500       14 Khandesh,       11,215,750         15 Khandesh,       11,105,000       15 Bidar,       9,324,359         16 Baghna,       6,885,000       16 Bengal,       13,115 906         17 Nande (Nandui),       7,200,000       17 Orissa,       3,570,500         18 Bengal,       40,000,000       18 Haidarabad,       27,834,000         19 Ujjain,       20,000,000       19 Bijapur,       26,957,625         20 Rajmahal,       10,050,000       Total       292,023,147         21 Kabul,       4,025,985	8	Multan,	5,025,000	8	Gujarat,	15,196,228
11 Orissa,       5,707,500       11 Daulatabad,       25,873,627         12 Allahabad,       7,738,000       12 Malwa,       10,097,541         13 Deccan,       16,204,750       13 Berar,       15,350,625         14 Berar,       15,807,500       14 Khandesh,       11,215,750         15 Khandesh,       11,105,000       15 Bidar,       9,324,359         16 Baghna,       6,885,000       16 Bengal,       13,115 906         17 Nande (Nandun),       7,200,000       17 Orissa,       3,570,500         18 Bengal,       40,000,000       18 Haidarabad,       27,834,000         19 Ujjain,       20,000,000       19 Bijapur,       26,957,625         20 Rajmahal,       10,050,000       Total       292,023,147         21 Kabul,       4,025,985	9		6,002,000	, 9	Behar,	10,179,025
12       Allahabad,       7,738,000       12       Malwa,       10,097,541         13       Deccan,       16,204,750       13       Berar,       15,350,625         14       Berar,       15,807,500       14       Khandesh,       11,215,750         15       Khandesh,       11,105,000       15       Bidar,       9,324,359         16       Bagina,       6,885,000       16       Bengal,       13,115 906         17       Nande (Nandui),       7,200,000       17       Orissa,       3,570,500         18       Bengal,       40,000,000       18       Haidarabad,       27,834,000         19       Ujjain,       20,000,000       19       Bijapur,       26,957,625         20       Rajmahal,       10,050,000       70       Total       292,023,147         21       Kabul,       4,025,985	01	Bakar,	2,400,000	10	Sind,	
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13 Deccan, 16,204,750 13 Berar, 15,350,625 14 Berar, 15,807,500 14 Khandesh, 11,215,750 15 Khandesh, 11,105,000 15 Bidar, 9,324,359 16 Baghna, 6,885,000 16 Bengal, 13,115 906 17 Nande (Nandui), 7,200,000 17 Orissa, 3,570,500 18 Bengal, 40,000,000 18 Haidarabad, 27,834,000 19 Ujjain, 20,000,000 19 Bijapur, 26,957,625 20 Rajmahal, 10,050,000 21 Bijapur, 50,000,000 22 Golconda, 50 000,000 23 Kashmir, 5,747,754 24 Kabul, 4,025,985	12	Allahabad,	7,738,000	12	Malwa,	10,097,541
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16     Baghna,     6,885,000     16     Bengal,     13,115 906       17     Nande (Nandui),     7,200,000     17     Orissa,     3,570,500       18     Bengal,     40,000,000     18     Haidarabad,     27,834,000       19     Ujjain,     20,000,000     19     Bijapur,     26,957,625       20     Rajmahal,     10,050,000     Total     292,023,147       21     Bijapur,     50,000,000     20     Kashmir,     5,747,754       21     Kabul,     4,025,985	14	Berar,	15,807,500	14	Khandesh,	11,215,750
17 Nande (Nandan),     7,200,000     17 Orissa,     3,570,500       18 Bengal,     40,000,000     18 Haidarabad,     27,834,000       19 Ujjain,     20,000,000     19 Bijapur,     26,957,625       20 Rajmahal,     10,050,000     Total     292,023,147       22 Golconda,     50 000,000     20 Kashmir,     5,747,754       21 Kabul,     4,025,985	15	Khandesh,		15	Bıdar,	9,324,359
18 Bengal,     40,000,000     18 Haidarabad,     27,834,000       19 Ujjain,     20,000,000     19 Bijapur,     26,957,625       20 Rajmahal,     10,050,000     Total     292,023,147       21 Bijapur,     50,000,000     20 Kashmir,     5,747,754       22 Golconda,     21 Kabul,     4,025,985	16	Baglana,	6,885,000	16	Bengul,	13,115 906
19 Ujjain, 20,000,000 19 Bijapur, 26,957,625 20 Rajmahal, 10,050,000 Total 292,023,147 21 Bijapur, 50,000,000 20 Kashmir, 5,747,754 22 Golconda, 50 000,000 21 Kabul, 4,025,985	17	Nande (Nandau),	7,200,000	17	Orissa,	
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21 Byapur, 50,000,000 Total 292,023,147 22 Golconda, 50 000,000 20 Kashmir, 5,747,754 21 Kabul, 4,025,985	19	Ujjain,	20,000,000	19	Bijapur,	26,957,625
22 Golcondr, 50 000,000 20 Kashmir, 5,747,754 4,025,985	20	Rajmahal,	10,050,000		m . 1	
21 Kabul, 4,025,98	21	Bijapur,	50,000,000	1		
	22	Golconda,	50 000,000	ı		
		71		21	Kabul,	4,025,985
Total, 379,534,552 Grand Total, 301,796,864		•		ĺ	Grand Total.	201.706.864
575575	_	•		1		or £30.170.680
24 Kabul, 3,207,250 or £30,179,080	24	Kabui,	3,207,250		·	- 23-1-131
Grand Total, 356,246,802		Grand Total,	356,246,802			
or £38,624,680		or				

The above lists are taken from Mr Edward Thomas' Revenue Resources of the Muzhal Limpire, pp 46 and 50 The whole subject is admirably discussed in his chapter entitled 'Aurangzeb's Revenues,' pp 33 et seq The four returns of the land revenue for his reign are, nett, 24 millions in 1655, 34½ millions in later official documents, 35½ millions in 1697. 30 millions in 1707

<sup>4</sup> Mr Edward Thomas' Revenue Resources of the Mughal Empire, p 54, etc (1871)

Character of Aurang zeb

Aurangzeb tried to live the life of a model Muhammadan Emperor Magnificent in his public appearances, simple in his private habits, diligent in business, exact in his religious observances, an elegant letter-writer, and ever ready with choice passages alike from the poets and the Kurán, his life would have been a blameless one, if he had had no father to depose, no brethren to murder, and no Hindu subjects to oppress But his bigotry made an enemy of every one who did not share his own faith, and the slaughter of his kindred compelled him to entrust his government to strangers The Hindus never forgave him, and the Sikhs, the Rajputs, and the Marathas, immediately after his reign, began to close in upon the Empire His Muhammadan generals and viceroys, as a rule, served him well during his vigorous life. But at his death they usurped his children's inheritance. The succeeding Emperors were puppets in the hands of the too powerful soldiers or statesmen who raised them to the throne, controlled them while on it and killed them when it suited their purposes to do so The subsequent history of the Empire is a mere record of run The chief events in its decline and fall are summarized below 1

Decline of the Mughal Empire

- 1 THE DUCLINE AND FALL OF THE MUCHAL EMPIKE,
- From death of Aurangeeb to that of Muhammad Bahadur Shah, 1707-1862
- 1707 Succession contest between Muzzim and Alum, two sons of Aurangzeb, victory of the former, and his accession under the title of Bahadur Shah, controlled by the General Zul fikar Khan Kevolt of Prince Kambaksh, his defeat and death
- 1710 Expedition against the Sikhs
- 1712 Death of Bahadur Shah, and accession of his clide t son, Jah indar Shah after a struggle for the succession an incapable monarch, who only ruled through his value, Zul fikar Khan Revolt of his nephew, Furukhsiyyar, defeat of the Imperial army, and execution of the Emperoi and his prime minister
- 1713 Accession of Furukhenyar, under the suspices and control of Husain Ali, Governor of Behar, and Abdulla, Governor of Milababal 1716 Invasion by the Sikhs, their defeat, and cruel persecution
- 1719 Deposition and murder of I arukhayy r by the Sayaid chiefs Husain Ali and Abdulla. They nominate in succession three boy Emperois, the first two of whom died within a few months after their accession. The third, Muhammad Shah, commenced his reign in September 1719.
- 1720 Murder of Husain Ali, and overthrow of the Savyid 'king makers
- 1720-48 The Governor of the Decean, or Nizam ul Mulkh, c tablishes his independence, and severs the Haidarabad Provinces from the Mughal Empire
- 17,2 43 The Governor of Oudh, who was also 11 a /r of the I mpire, accomes practically independent of Delhi

[ I cotnote continued on next page

For a time, Mughal Emperors still ruled India from Delhi But of the six immediate successors of Aurangzeb, two were The six under the control of an unscrupulous general, Zul fikar Khen, 1 'Pupper' while the four others were the creatures of a country of the control of the country while the four others were the creatures of a couple of Sayyid adventurers who well earned their title of the 'king-makers' From the year 1720, the breaking up of the Empire took a more open form The Nızám ul-Mulkh, or Governor of the

- 1735-51 General decline of the Empire, revolts within, and invasion of Nadır Shah from Persia (1739) The Maiathas obtain Valwa (1743), followed by the cession of Southern Orissa and tribute from Bengal (1751) First invasion of India by Ahmad Shah Durani, who had obtained the throne of Kandahar (1747), his defeat in Sirhind
- 1748 Death of Muhammad Shah
- 1748-50 Accession of Ahmad Shah, his son, disturbances by the Rohilla Afghans in Oudh, and defeat of the Imperial troops
- 1751 The Rohilla insurrection crushed with the aid of the Marathas
- 1751-52 Second invasion of India by Ahmad Shah Duram, and cession of the Puniab to him
- 1754 Deposition of the Emperor, and accession of Alanigu II
- 1756 Third invasion of India by Ahmad Shah Durani, and sack of Delhi
- 1759-61 Fourth invasion of India by Ahmad Shah Durani, and murder of the Emperor Alamgir II by his t and, Ghazi ud din. The Maiatha conquests in Northern India The Maiathas complete their organiza tion for the conquest of Hindustan, capture of Delhi
- 1761-1805 The third battle of Paniput, between the Afghans under Ahmad Shah and the Maiathas, defeat of the latter From this time the Mughal Empire ceased to exist, except in name victory of Baxar, grined by Viajor Munro, breaks the Mughal power in Bengal The Diwani or administration, of Bengal, behai, and Ori sa is granted by the Emperor to the But sh in 1765 The norm of Emperor on the death of Alamgir II was Shah Alam II, an earle, who resided till 1771 in Allahabad, a pensioner of the British 1771 he threw in his fortunes with the Marathas, who restored him to a fragment of his hereditary dominions. The I mperor was b inded and imprisoned by rebels. He was afterwards rescued by the Marathas, but was virtually a pusoner in their hands till 1803, when the Maratha power was overthrown by Lord Lake Shah Alam died in 1806, and was succeeded by his son,
- 1806-1837 Akbar II, who succeeded only to the nominal dignity, and lived till 1837, when he was followed by
- 1837-62 Muhammad Pahadui Shah, the seventeenth Mughal Emperor, and last of the race of Timur For his complicity in the Mutiny of 1857 he was deposed and lamshed for life to Kangoon, where he died, a British State prisoner, in 1862. Two of his sons and grand son were shot by Hodson in 1857, to prevent a rescue, and for then porticipation in the murder of Linglish women and children at Delhi
- 1 Sir Henry I that s I et vian Historians vol vii pp 348-558 (Trubner, 18771

Independence of the Deccan, 1720-48, of Oudh, 1732-43

Hindu risings

Oppres sion of the Sikhs, 1710-16

Rajput indepen dence 1715
The Maratha chauth, 1751

Deccan, established his independence, and severed the largest part of Southern India from the Delhi rule (1720–48) The Governor of Oudh, originally a Persian merchant, who had risen to the post of Wazír or Prime Minister of the Empire, established his own dynasty in the Provinces which had been committed to his care (1732–43)

The Hindu subjects of the Empire were at the same time establishing their independence The Sikh sect in the Puniab. driven by oppression into revolt, had been mercilessly crushed The indelible memory of the cruelties then ın 1710-16 inflicted by the Mughal troops nerved the Sikh nation with that hatred to Delhi which served the British cause so well in 1857 In 1716, the Sikh leader, Banda, was carried about by the insulting Mughals in an iion cage, tricked out in the mockery of imperial robes, with scarlet turban and cloth of gold His son's heart was torn out before his eyes, and thrown in his face He himself was then pulled to pieces with red-hot pincers, and the Sikhs were exterminated like mad dogs (1716) The Hindu princes of Raiputana were more fortunate Aut Singh of Jodhpur asserted his independence, and Rajputana practically severed its connection with the Mughal Empire in 1715 The Maráthás having enforced their claim to black-mail (chauth) throughout Southern India, burst through the Vindhyas upon the north, obtained the cession of Malwa (1743) and Orissa (1751), with an Imperial grant for tribute from Bengal (1751) But the great Hindu military revival represented by the Maratha power demands a separate section for itself, and will be narrated in the next chapter

Invasions from the north west, 1739-61 Nachr Shah, 1739

While the Muhammadan governors and Hindu subjects of the Empire were thus asserting their independence, two new sets of external enemies appeared. The first of these consisted of invasions from the north west. In 1739, Nadii Shah, the Persian, swept down with his destroying host, and, after a massacre in the streets of Delhi and a fifty cight days' sick, went off with a booty estimated at 32 millions sterling? Six times the Afghans burst through the passes under Ahmad Shah Duraní, plundering, slaughtering, and then scornfully retiring to their homes with the plunder of the Empire. In 1738, Kábul, the last Afghan Province of the Mughals, had been severed from Delhi, and in 1752, Ahmad Sháh the Afghan obtained the

- <sup>1</sup> Chin Khilich Khan or Azaf Shah, a Turkoman Sunni
- . Saadat Alí Khan, a Persian Shirh
- 4 Mill . History of british In lia, vol n p 456 (Wilson's edition, 1840)

cession of the Punjab The cruelties inflicted upon Delhi and Ahmad Northern India during these six invasions form an appalling Shah, 1748-61 tale of bloodshed and wanton cruelty The miserable capital Afghán opened her gates, and was fain to receive the Afghans as invasion, guests Yet on one occasion it suffered for six weeks every 1747-61 enormity which a barbarian army can inflict upon a prostrate Meanwhile the Afghán cavalry were scouring the country, slaying, burning, and mutilating in the meanest hamlet as in the greatest town They took especial delight in sacking the holy places of the Hindus, and murdering the defenceless votaries at the shrines

A horde of 25,000 Afghán horsemen swooped down upon Misery the sacred city of Muttra during a festival, while it was of the Provinces, thronged with peaceful Hindu pilgrims engaged in their devo 1747-61 'They burned the houses,' says the Tyrolese Jesuit Lieffenthaler, who was in India at that time, 'together with their inmates, slaughtering others with the sword and the lance, hauling off into captivity maidens and youths, men and In the temples they slaughtered cows,' the sacred arimal of the Hindus, 'and smeared the images and pavement with the blood' The border land between Afghanistan and Afghan India lay silent and waste, indeed, districts far within the atrocities frontier, which had once been densely inhabited, and which are now again thickly peopled, were swept bare of inhabitants

Another set of invaders came from the sea In the wars Invaders between the French and Lnglish in Southern India, the last from the vestiges of the Delhi authority in the Madras Presidency disappeared (1748-61) The victory of Baxar, gained by Major Munro in 1764, broke the Mughal power in Northern India, and drove the Emperor himself to seek shelter in our camp Bengal, Behar, and Oussa were handed over to the English by an imperial grant in 1765. We technically obtained these Fall of the fertile Provinces as the nominee of the Emperor , but the third  $^{\mbox{\it Empire}}$ battle of Pánípat had four years previously reduced the throne of Delhi to a shadow The third battle of Panipat was fought Battle of in 1761, between the Afghan invader Ahmad Shah and the Panipat, Maratha powers, on the memorable plain on which Babar in 1526, and Akbar in 1556, had twice won the sovereignty of India

I hat sovereignty was now, after little more than two centuries of Mughal rule, lost for ever by their degenerate descendants The Afghans defeated the Marathas at Panipat in 1761, and during the anarchy which followed, the British patiently built up a new power out of the wreck of the Mughal Empire

# 316 THE MUGHAL EMPIRE, 1526-1761

Mughal pensioners and imperial puppets reigned still at Delhi over a numerous seriglio under such lofty titles as Akbar II or Alamgir (Aurangzeb) II But their power was confined to the palace, while Marathás, Sikhs, and Englishmen struggled for I act of the the sovereignty of India The last nominal Emperor emerged for a moment as a rebel during the Mutiny of 1857, and died a State prisoner in Rangoon in 1862

#### CHAPTER XII

THE MARATHA POWER (1634 TO 1818 AD)

THE British won India, not from the Mughals, but from the British Hindus Before we appeared as conquerors, the Mughal India won not from Empire had broken up Our conclusive wars were neither with the the Delhi King, nor with his revolted governors, but with the Mughals, but from two Hindu confederacies, the Marathas and the Sikhs Our the last Marátha war dates as late as 1818, and the Sikh Confederation was not finally overcome until 1849

About the year 1634, a Maratha soldier of fortune, Shahji Rise of the Bhonsla by name, began to play a conspicuous part in Maratha Southern India <sup>1</sup> He fought on the side of the two independent Shahji Bhonsla Muhammadan States, Ahmadnagar and Bijapur, against the 1634 Mughals, and left a band of followers, together with a military fief, to his son Sivaji, born in 1627 <sup>2</sup> Sivaji formed a national Sivaji party out of the Hindu tribes of Southern India, as opposed alike to the imperial armies from the north, and to the independent Muhammadan kingdoms of the Deccan There were thus, from 1650 onwards, three powers in the Deccan

1 The original authorities for the Maratha history are—(1) James Grant Duff's History of the Marath is 3 vols (Bombay reprint, 1863) (2) Ldward Scott Waring's History of the Ma areas (quarto, 1810), (3) Major William Thorne's Memon of the II is in India onducted by General Lord Lake (quarto, 1818), (4) Sidney [ Owen 5 & tions from the Destatches of the Marquis of Hellesley (1877), (5) his Selection from the Indian Despatche of the Dule of Wellington (1880), and (6) Henry T Prinsep's Narrati e of Political and Military Transactions of Britis: India under the Marquis of llastings (quarto, 1820) The very prief notice of the Maruthas which the scope of the present work allows, precludes an exhaustive use of these storehouses But it should be mentioned that the later history of the Marathas (since 1819) has yet to be written. The leading incidents of that history are described in separate articles in The Imperial Gautteer of India To save space, this chapter confines itself, as far as practicable, to referring Ample materials will be found in the in footnotes to those articles Gazetteers of the Bombay Districts and Central Provinces

3 Grant Duff's History of the Marathas, vol 1 p 90 (ed 1863)

Three parties in the Deccan, 1650

first, the ever-invading troops of the Delhi Empire, second, the forces of the two remaining independent Muhammadan States of Southern India, namely, Ahmadnagar and Bijápur, third, the military organization of the local Hindu tribes, which ultimately grew into the Maratha confederacy

Strength of the Hindu or third purty

During the eighty years' war of Shah Jahan and Aurangzeb, with a view to the conquest of Southern India (1627-1707). the third or Hindu party fought from time to time on either side, and obtained a constantly-increasing importance Mughal armies from the north, and the independent Muhammadan kingdoms of the south, gradually exterminated each other Being foreigners, they had to recruit their exhausted forces chiefly from outside The Hindu confederacy drew its merhaustible native levies from the wide tract known as Maharáshtra, stretching from the Berars in Central India to

the other two

Courted by near the south of the Bombay Presidency The Maráthás were therefore courted alike by the Imperial generals and by the independent Muhammadan sovereigns of the Deccan With true Hindu statecraft, their leader, Sivaji, from time to time aided the independent Musalmán kingdoms of the Deccan against the Mugnal avalanche from the north Those kingdoms, with the help of the Marathas, long proved a match for the imperial troops But no sooner were the Delhi armies driven back, than the Marathas proceeded to despoil the independent Musalmán kingdoms On the other hand, the Delhi generals, when allied with the Marathas, could completely overpower the independent Muhammadan States

Sivaji,

Sivaji saw the strength of his position, and, by a course born 1627, of treachery, assassination, and hard fighting, won for the Marathás the practical supremacy in Southern India1 basis for his operations, he perched himself safe in a number of impregnable hill forts in the Bombay Presidency troops consisted of Hindu spearmen, mounted on hardy They were the peasant proprietors of Southern India, ponies and could be dispersed or called together on a moment's notice, at the proper seasons of the agricultural year had therefore the command of an unlimited body of troops, without the expense of a standing army. With these he swooped down upon his enemies, exacted tribute, or forced Histactics them to come to terms He then paid off his soldiery by a part of the plunder, and while they returned to the sowing or

His army of horse men

His hill forts

1 The career of Sivaji is traced in Grant Duff's History of the Maráthás, vol 1 pp 90-220 The Bombay reprint of Grant Duff's History, in three volumes, 1863, is invariably referred to in this chapter

reaping of their fields, he retreated with the lion's share to his hill forts In 1650 he lured the Bijapur general into an ambush, stabbed him at a friendly conference, and exterminated his In 1662-64, Sivají raided as far as the extreme north of the Bombay Presidency, and sacked the Imperial city of In 1664 he assumed the title of king (Rájá), with the Coins royal prerogative of coining money in his own name 1

The year 1665 found Sivai helping the Mughal armies against the independent Musalman State of Bijapur 1666 he was induced to visit Delhi. Being coldly received Visios by the Emperor Aurangzeb, and placed under restraint, he Telhi, 1666, escaped to the south, and raised the standard of revolt.2 In 1674, Sivali enthroned himself with great pomp at Raigarh, Fnthrones weighing himself in a balance against gold, and distributing himself, the precious counterpoise among his Brahmans 3 After sending forth his hosts as far as the Karnatik in 1676, he died in 1680 Died,

The Emperor Aurangzeb would have done wisely to have left Aurangthe independent Musalmán Kings of the Deccan alone, until zeb's mis he had crushed the rising Marathá power Indeed, a great taken statesman would have buried the old quarrel between the 1688 1707 Muhammadans of the north and south, and united the whole forces of Islam against the Hindu confederacy which was rapidly organizing itself in the Deccan But the fixed resolve of Aurangzebs life was to annex to Delhi the Muhammadan kingdoms of Southern India By the time he had carried out this scheme, he had wasted his armies, and left the Mughal Empire ready to break into pieces at the first touch of the Marathas

Sambhaji succeeded his father, Sivaji, in 1680, and reigned Sambhaji till 1689 4 His life was entirely spent in wars with the Portu- 1680-89 guese and Mughals In 1680, Aurangzeb captured him I mperor burnt out his eyes with a red-hot iron, cut out the tongue which had blasphemed the Prophet, and struck off his head

His son, Sahu, then six years of age, was also captured and Sahu. kept a prisoner till the death of Aurangzeb In 1707 he was 1707 restored, on acknowledging allegiance to Delhi But his long captivity among the Mughals left him only half a Maratha.5

<sup>1</sup> Grant Duff's History of the Harathas, vol 1 p 146

<sup>2</sup> Idem, vol 1 chap v ad finem 3 Idem, vol 1 pp 191-193

<sup>4</sup> For the career of Sambhaji, see Grant Duff's History of the Maiathas, vol 1 pp 220-261

The care r of Sahu is traced in Grant Duff's History of the Marathas, vol 1 pp 297-306

He wasted his life in his seraglio, and resigned the rule of his territories to his Bráhman minister Bálají Vishwanáth, with Rise of the title of Peshwá 1 This office became hereditary, and the Peshwas power of the Peshwa superseded that of the Maratha kings

The family of Sivan only retained the little principalities of Satara and Satára and Kolhapur Sátara lapsed, for want of a direct heir, Kolhapur to the British in 1848 Kolhapur has survived through their the last of clemency, and was ruled, under their control, by the last Sivages adopted representative of Sivaji's line 2 until 1883 On his line death, in December 1883, another Marathá youth of high family was placed by the British Government, in virtue of the adoption sanad, on the State cushion of Kolhápur

Progress of the P.shwas. 1718

Meanwhile the Peshwas were building up at Poona the great Marátha confederacy In 1718, Balan, the first Peshwí, marched an army to Delhi in support of the Saviid 'king-In 1720 he extorted an Imperial grant of the chauth or 'one fourth' of the revenues of the Deccan Marathas were also confirmed in the sovereignty of the countries round Poona and Sátára The second Peshwa, Ball Rao (1721-40), converted the tribute of the Deccan granted to his father into a practical sovereignty In fifteen vears he wrested the Province of Malwa from the Empire (1736), together with the country on the north west of the Vindhyas, from the Narbada to the Chambal 3 In 1739 6 hc captured Bassein from the Portuguese

Second Peshw i conquers the Deccan, 1721-40

Third Peshwa, 1740-61

Conquests in the Deccan

I ype ditions b-sond it

The third Peshwa, Balan Ban Rao, succeeded in 1740, and carried the Maratha terror into the heart of the Mughal Empire 7 The Deccan became merely a starting point for a vast series of their expeditions to the north and the east Within the Deccan itself he augmented his sovereignty, at the expense of the Nizam after two wars. The great centres of the Maratha power were now fixed at Poona in Bombay and Nagpui in the Berars In 1741-42, a general of the Berar branch of the Marathas known as the Bhonslas, swept down upon Bengal, but, after plundering to the suburbs of the Muhamto Bengal, madan capital Murshidabad, he was driven back through Orissa by the Viceroy Ali Vardi Khán The 'Marátha Ditch,' or 1 For Bálan s career, see Grant Duff's Hist of the Marathas, vol 1 pp

307-339

<sup>2</sup> See articles KOI HAILR and SATAIA, Imperial Ga ether of India

<sup>3</sup> Vide ante, p 313

Grant Duff's History of the Maráthas, vol 1 pp 324, 325 Grant Duff's History of the Mardthas, vol 1 pp 393-395

<sup>6</sup> For Ban Rao's career, see of cut vol 1 pp 344-410

<sup>7</sup> His career i sketched in of the vol ii pp 1-115

semicircular moat around part of Calcutta, records to this day the panic which then spread throughout Bengal 1743, the head of the Berar Maráthas, Raghují Bhonsla, himself invaded Bengal in force From this date, in spite of quarrels between the Poona and Berar Maráthas over the spoil, the fertile Provinces of the Lower Ganges became a plundering ground of the Bhonslas In 1751 they obtained a formal grant from the Viceroy Alí Vardí of the chauth or 'quarterrevenue' of Bengal, together with the cession of Orissa In Northern India, the Poona Maráthás raided as far as the To the Punjab, and drew down upon them the wrath of Ahmad Shah, Punjab, 1760 the Afghan, who had wrested that Province from Delhi the third battle of Panipat, the Maráthás were overthrown, by Panipat, the combined Muhammadan forces of the Afghans and of 1761 the Provinces still nominally remaining to the Mughal Empire (1761)

The fourth Peshwa, Madhu Rao, succeeded to the Maratha Fourth sovereignty in this moment of ruin <sup>1</sup> The Hindu confederacy Peshwa, 1761-72 seemed doomed to destruction, alike by internal treachery and by the superior force of the Afghan arms As early as 1742, the Poona and Berar branches had taken the field against each other, in their quarrels over the plunder of Bengal Before 1761, two other branches, under Holkar and Sindhia, had set up for themselves in the old Mughal Province of Malwá and the neighbouring tracts, now divided between the States of Indore and Gwalior At Pánipat, Holkar, the head of the Indore branch, deserted the Hindu line of battle when he saw the tide turn, and his treachery rendered the Maratha rout The fourth Peshwá was little more than the nominal centre of the five great Maratha branches, with their The five respective head-quarters at Poona, the seat of the Peshwas, Maiatha at Nágpur, the capital of the Bhonslas, in Berar, at Gwalior, the residence of Sindhia, at Indore, the capital of Holkar, and at Baroda, the seat of the rising power of the Gaekwars Madhu Ráo, the fourth Peshwa, just managed to hold his own against the Muhammadan princes of Haidarábad and Mysore, and against the Bhonsla branch of the Marithas in Berar His younger brother, Náráyan Rao, succeeded him as fifth Peshwa. Peshwá in 1772, but was quickly assassinated 2 From this time the Peshwa's power at Poona begins to Decline

recede, as that of his nominal masters, the lineal descendants of the Peshwas, 1 For his career, see Grant Duff's Hist of the Marathas, vol 11 pp 1772 1818

<sup>2</sup> Grant Duff's History of the Marathás, vol 11 pp 174-178 VOL VI

of Sıvajı, had faded out of sight at Sátara and Kolhápur The Peshwas came of a high Brahman lineage, while the actual fighting force of the Maráthas consisted of low caste Hindus It thus happened that each Murathá general who rose to independent territorial sway, was inferior in caste, although possessed of more real power than the Peshwa, the titular head of the confederacy Of the two great northern houses, Holkar was descended from a shepheid,1 and Sindhia from a slipper bearer 2 These potentates lay quiet for a time after their crushing disaster at Panipat But within ten years of that fatal field, they had finally established themselves throughout Malwa, and invaded the Rajput, Jat, and Rohillá Provinces, from the Puniab on the west to Oudh on the east (1761-71) In 1765, the titular Emperor, Shah Alam, had sunk into a British pensioner after his defeat at Baxar 1761 1803 1771 he made overtures to the Maráthás Holkar and Sindhia nominally restored him to his throne at Delhi, but held him a virtual prisoner till 1803-04, when they were overthrown by our second Marathá war

**Progress** of the northern Marathas

Sindhia and Holkar

7 he Bronslas of Berar 1751 1853

The third of the northern Maratha houses, namely, the Bhonslas of Berar and the Central Provinces, occupied themselves with raids to the east. Operating from their basis at Nagpur,3 they had extorted, by 1751, the chauth or 'quarterrevenue' of Bengal, together with the sovereignty of Orissa The accession of the British in Bengal (1756-65) put a stop to their raids in that Province In 1803, a division of our army drove then out of Orissa. In 1817, their power was finally broken by our last Maratha war. Their head quarter territories, now forming the Central Provinces,4 were admini stered under the guidance of British Residents from 1817 to On the death of the last Raghun Bhonsla, without issue, in 1853, Nagpur lapsed to the British

The of Baroda

The fourth of the northern Maratha houses, namely, Gaekwars Baroda, extended its power throughout Gujarat, on the northwestern coast of Bombay, and the adjacent peninsula of Káthiawár The scattered but wealthy dominions known as the Territories of the Gackwar were thus formed our last Marathá war, in 1817, Baroda has been ruled by the Gackwar, with the help of a British Resident and a

<sup>1</sup> See article INDORF, The Imperial Ga ettier of India

<sup>2</sup> Scc article GWAI 10R, The Imperial Ca effect of India

<sup>3</sup> See article NAGPUR, The Imperial Garether of India

<sup>4</sup> See article CENIRAL I ROVINCES, The Imperial Ga etter of India

b See article BARODA, I he Imperial Gazetteer of India

subsidiary force In 1874, the reigning Gáekwar, having Baroda in attempted to poison the Resident, was tried by a High Com- 1874 mission consisting of three European and three native members, found guilty, and deposed But the British Government refrained from annexing the State, and raised a descendant of the founder of the family from poverty to the State cushion

While these four northern houses of the Maráthás were pursuing their separate careers, the Peshwa's power was being broken to pieces by family intrigues The sixth Peshwa, Sixth Madhu Ráo Náráyan, was born after his father's death, and Peshwa, during his short life of twenty one years the power remained 1774-95 in the hands of his minister, Náná Farnavis Raghuba, the uncle of the late Peshwa, disputed the birth of the posthumous child, and claimed for himself the office of Peshwá. infant's guardian, Náná Farnavis, having invoked the aid of tne French, the British sided with Raghuba These alliances brought on the first Marathá war (1779-81), ending with the First Mai treaty of Salbai (1782) That treaty ceded the islands of atha war, Salsette and Elephanta with two others to the British, secured to Raghubá a handsome pension, and confirmed the child-Peshwá in his sovereignty. The latter, however, only reached manhood to commit suicide at the age of twenty one

His cousin, Bájí Ráo II, succeeded him in 1795 as the Seventh seventh and last Peshwa The northern Maratha house of and last Peshwa Holkar now took the lead among the Marathás, and forced the 1795 1818 Peshwa into the arms of the English By the treaty of Bassein in 1802, the Peshwa agreed to receive and pay for a British force to maintain him in his dominions. The northern Maráthá houses combined to break down this treaty. The second Maratha war followed (1803-04) General Wellesley Second crushed the forces of the Sindhia and Nagpur houses on the Maratha great fields of Assaye and Argaum in the south, while Lord 1803-04 Lake disposed of the Marátha armies at Laswári and Delhi in the north In 1804, Holkar was completely defeated at Dig These campaigns led to large cessions of territory to the British, the overthrow of the French influence in India, and the replacement of the titular Delhi Emperor under the protection of the Figlish In 1817-18, the Peshwa, Holkar, Last Muand the Bhonsla Maráthás at Nagpur took up arms, each on atha war, his own account, against the British, and were defeated in detail. That war finally broke the Maratha power Peshwa, Bají Rao, surrendered to the British, and his territories

were annexed to our Bombay Presidency <sup>1</sup> The Peshwa remained a British pensioner at Bithúr, near Cawnpore, on a Fnd of the magnificent allowance, till his death. His adopted son grew up into the infamous Naná Sáhib of the Mutiny of 1857, when the last relic of the Peshwas disappeared from the eyes of men

1 For a summary of the events of this last Maratha war, rule fost, pp 401, 402 Also Grant Duff's History of the Marathas, vol in passing

### CHAPTER XIII

#### THE INDIAN VERNACULARS AND THEIR LITERATURF

THE foregoing chapters have summarized the successive The three settlements of Asiatic peoples in India The remainder of stages in Indian this volume will deal with altogether different aspects of Indian history For the three essential stages in that history are—(1) first, the long struggle for India by the races of Asia, second, Struggle a shorter struggle for India by European nations, third, the by the consolidation of India under British rule From the great Asiatic contest of five thousand years, England emerged the victor races,
We have seen how the tidal waves of Asiatic populations— European pre-Aryan, Aryan, Scythic, Afghan, and Mughal-swept across nations, India from the north The next chapter (xiv) will exhibit the (3) Con briefer, but not less eventful, efforts of the European maritime solidation of India powers to enter India from the sea The conquest of India under by the British, and an account of the administration which British they have established throughout its widely separated Provinces, will conclude this volume

The inroads under Alexander the Great and his successors Greek had proved momentary episodes,—episodes, moreover, of an inroads Asiatic rather than of a European type The Greek and and semi Græco Bactrian hosts entered India from the north, they Asiatic in effected no settlements beyond the frontier Province, and the type permanent element in their forces consisted of Asiatic rather than of European troops The civilisation and organization of India, from a prehistoric period many thousand years before Christ down to the 15th century AD, had been essentially the work of Asiatic races Since the end of that century, when the Portuguese landed on the Malabar coast, the course of Indian history has been profoundly influenced by European nations

Before entering on this new period, therefore, it is desir- Asiatic able to obtain a clear idea of India, as moulded by the civilisation survival of the fittest among the Asiatic peoples who had struggled for the Indian supremacy during so many thousand years The social constitution of the Indian races on the

twofold basis of religion and caste, has been fully explained. Their later political organization under the Afghans, Mughals, and Marathas, has been more briefly summarized. It remains, however, to exhibit the geographical distribution of the Indian races, and the local landmarks, literatures, and languages, which the Europeans found on their arrival in India.

As found by the European Powers

India in the 1st century Before the beginning of the Christian era, Northern India was partitioned out among civilised communities in which the Aryan element prevailed, while the southern peninsula was covered with forests, and dotted with the settlements of non-Aryan peoples. The Northern Aryans had a highly developed literary language, Sanskrit. They spoke less artificial cognate dialects, called Prákrits, which (equally with the Sanskrit) had grown out of the primitive Indo Germanic tongue. The non-Aryans of Southern India at that period knew nothing of the philosophy or sciences which flourished in the north. They had not even a grammatical settlement of the principles of their own language, and they used vernaculars so uncouth as to earn for them, from the civilised Aryans, the name of Mlechchhas, meaning the people of imperfect utterance or broken speech.

India in the 16th century When the European nations arrived in India during the 16th and 17th centuries, all this had changed. The stately Sanskrit of the Northern Aryans had sunk into a dead language, still used as a literary vehicle by the learned, but already pressed hard by a popular literature in the speech of the people. The Prakrits, or ancient-spoken dialects, had given place to the modern vernaculars of Northern India. In Southern India a still greater change had taken place. The obscure non Aryan races had there developed a political organization and a copious literature, written in vernaculars of their own,—vernaculars which, while richly endowed for literary uses, remained non Aryan in all essentials of structure and type

The Dra

Leaving aside, for the moment, the changes among the Aryans in the north, let us briefly examine this survival of prehistoric non-Aryan life in the southern peninsula. The non-Aryan races of the south were spoken of by Sanskrit authors under the general name of Dravidas, and their

<sup>&</sup>lt;sup>1</sup> For the ideas connoted by this word, and its later application to the Huns and Musalmans, see the Honourable K T Telang's Lesay on the Mud arakhasa, pp 4 7, 12, etc., and footnotes Bombay

languages under the vague term Paisáchí The latter term covered, however, a wider linguistic area, from the speech of the Bhotas of Tibet to that of the Pándyas or Tamil-speaking tribes of Southern India

Modern philology, rejecting any generic term, proves that the scattered non-Aryan languages of India belong to separate Some of the isolated tribes, who still survive in their hill and forest retreats around Bengal, entered from the northeast, and brought with them dialects akin to the Chinese great body of Dravidian speech in the south seems, however, to have had its origin, equally with the Aryan languages, to the north-west of the Himálavas It would appear that long The before the Aryan invasions, a people speaking a very primi- Drividian tive Central Asian language, had entered by the Sind passes route These were the Dravidas or Dravidians of later times Other non-Aryan races from the north pushed them onwards to the present Dravidian country in the south of the peninsula But the Dravidians had left more than one colony on their line of march The Brahuis of the Sind frontier, the Gonds and Kus of the Central Provinces, the Uraons of Chutiá Nagpur, with a tribai offshoot in the Raimahal hills overlooking the Gangetic valley,1 remain to this day as landmarks along the Dravidian route through India

The Dravidian language contains words apparently belonging The to a phase of human speech, anterior to the separation of the Dravidian language Indo Germanic from the Scythian stocks 2 It presents affinities to the present Ugrian of Siberia, and to the present Finnish of Northern Europe, while its analogies to the ancient Behistun tablets of Media have been worked out by the great Dravidian scholar of our times 3 Those tablets recorded the life of Darius Hystaspes in the old Persian, together with a rendering in the speech of the Scythians of the Medo-Persian Empire They date from the 5th century BC, and they indicate a Its place common starting-place of the Turanian family of lan-in philo guages whose fragments have been scattered to the shores of logy

1 Introduction to the Malto Language, p w (Agra, 1884), by the Rev Ernest Droese, to whom the author is indebted for valuable local details which he hopes to incorporate hereafter in a larger work

<sup>2</sup> Comparative Grammar of the Diacidian Language, by Bishop Caldwell, p 46, ed 1875 Unfortunately, the paging of that edition repeats itself, running as far as p 154 in the introduction, and commencing again (in a slightly different type) at p I of the Grammar itself Except when otherwise mentioned, the pages cited in this book refer to the first or introductory series of Bishop Caldwell's numerals

<sup>3</sup> Idem, pp 68 72, and 106

the Baltic, the Steppes of Northern Siberia, and the Malabar This family belongs to the primæval agglutinative phase of human speech, as opposed to the inflectional stage which the later Aryan migrations into India represent The Dravidians found refuge, after their long wanderings, in the sea-girt extremity of the Indian peninsula. In its isolation this Turanian speech has there preserved its primitive type, and forms one of the most ancient relics of the prehistoric world

The Diavidians literature

The extrusion of the Dravidians from Northern India had in Sanskrit taken place before the arrival of the Aryan speaking races The Dravidians are to be distinguished from the later non-Aryan immigrants, whom the Vedic tribes found in possession of the valleys of the Indus and Ganges These later non-Aryans were in their turn subjugated or pushed out by the Aryan newcomers, and they accordingly appear in the Vedic hymns as the 'enemies' (Dasyus) and serfs' (Sudras) of the Indo-Aryan settlers The Dravidian non Aryans of the south, on the other hand, appear from the first in the Sanskrit as friendly forest folk, the monkey armies who helped the Aryan hero Ráma on his march through Southern India against the demon king of Cevlon

civilisa tion

The Tamil language still preserves evidence of a Dravidian civilisation before the southern advance of the Arvans which tl e Ramayana represents 'They had "kings," writes Bishop Pre A vai Calawell,1 'who dwelt in "strong houses," and ruled over small Drividian ' districts of country ' They had "minstrels' who recited "songs' at "festivals," and they seem to have had alphabetical "characters" written with a stylus on palmyra leaves A bundle of those leaves was called a "book" I hey acknowledged the existence of God, whom they styled Ko or King erected to his honour a "temple," which they called Kô-il, Marriage existed among them They were acquainted with the ordinary metals, with the exception of tin, lead, and zinc, with all the planets ordinarily known to the ancients, excepting Mercury and Saturn They had numerals un to a hundred, some of them up to a thousand They had 'mcdicines," "hamlets" and "towns," but no cities, "canoes," 'boats" and even "ships" (small decked coasting vessels)

Diavidian art

'I hey were well versed in "agriculture,' and delighted in "war" They were armed with "bows" and "arrows," with "spears" and "swords" All the ordinary or necessary arts of life, including "spinning," 'weaving," and "dyeing," existed 1 Comparative Grammar of the Dravidian Larguages, cordensed from pt 117, 118

among them They excelled in "pottery," as their places of sepulture show They were ignorant, not only of every branch of "philosophy," but even of "grammar" Their undeveloped intellectual condition is especially apparent in words relating to the operations of the mind To express "the will" they would have been obliged to describe it as "that which in the inner part says, I am going to do so and so"

While the Dravidians appear in Sanskrit literature as Legend of friends or allies, the Aryans were not their conquerors, Agastya but their 'instructors' or 'fathers' The first Brahman settlers in the south came as hermits or sages, who diffused around them a halo of higher civilisation earliest of such Bráhman colonies among the Dravidians, led by the holy Agastya, has long faded into the realms of mythology 'The Vindhya Mountains, it is said, 'prostrated themselves before Agastya,' still fondly remembered as the I amir-muni, pre-eminently the Sage to the Tamil race introduced philosophy at the court of the first Pándyan king, wrote many treatises for his royal disciple, and now lives for ever in the heavens as Canopus, the brightest star in the Southern Indian hemisphere He is worshipped as Agasteswara, the Lord Agastya, near Cape Comoran But the orthodox still believe him to be alive, although invisible to sinful mortals, hidden away in the conical mountain called Agastya's Hill, from which the sacred river of Tinnevelli springs

This legend serves to indicate the influence of Sanskrit civilisa- Biahmanic tion and learning among the Dravidian race That influence on the was essentially a friendly one The Bráhmans became the Dra 'fathers' of the less advanced race, and although they vidians classified the non-Aryan multitude as Súdras, yet this term did not connote in Southern India the ideas of debasement and servitude which it affixed to the non-Arvan races in the north The Buddhist missionaries were probably the first Aryan instructors of the Dravidian kings and peoples, and their labours must have begun before the commencement of the Christian era

Bishop Caldwell takes the Aivan emigration under Vijaya, from Magadha in Bengal to Ceylon, circa BC 550, as the starting point of Aryan civilisation in Southern India Dr Burnell, Comhowever, believes that Aryan civilisation had not penetrated mence deeply among the Dravidians until the advent of Kumarila, that the Brahman reformer from Behar in the 8th century A D 1 influence

<sup>1</sup> Dr Burnell's article in the Indian Antiquary for October 1872

Bráhman hermits had doubtless taught the Dravidian peoples, and Brahman sages had adorned Dravidian courts long before this latter date. But it was from the great religious revival of the 8th century, that the continuous and widespread influence of Brahman civilisation in Southern India took its rise.

Dravidi in speech developed

The Bráhman apostles of the Sivaite and Vishnuite faith, from the 8th to the 12th century AD, composed their religious treatises in Sanskrit. The intellectual awakening, produced by their teaching, also gave the first impulse to the use of the vernacular languages of India for literary purposes. The Dravidians gratefully acknowledge that they owe the settlement of the grammatical principles of their speech to Sanskrit sages, among whom the legendary Agastya holds the highest rank. But the development of that speech into a vernacular literature was chiefly the work of the Dravidians themselves. Indeed, the first outburst of their vernacular literature sprang from the resistance of their previous Buddhistic faith to the Brahmanical religious revival

into ver nacular h cratures

The Dra vidian dialects

The Tamil

Before the arrival of the European nations in the 16th and 17th centuries, four Dravidian dialects had developed literatures The Tamil, the Telugu, the Kanarese, and the Malayaham are now literary languages of established reputation space compels us to concentrate our attention on the oldest and most influential of the vernacular literatures of Southern India,—the Tamil This language, in its structure and its vocabulary, forms the best representative of cultivated Dravidian speech It has not feared to incorporate such philosophical, religious, and abstract terms as it required from the Sanskrit its borrowings in this respect are the mere luxuries or delicacies of the language, and they have left unaffected its robust native fabric 'Tamil,' writes Bishop Caldwell 'can readily dispense with the greater part or the whole of its Sanskrit, and by dispensing with it, rises to a purer and more refined style '2 He maintains that the Ten Commandments can be translated into classical Tamil with the addition of a single Sanskrit word I hat word is 'image'

First cultivation of Tamil According to native tradition, Tamil was first cultivated by the sage Agastya Many works, besides a grammur and treatises on philosophy and science, are ascribed to him His name served indeed as a centre around which Tamil compositions of widely separated periods, including some of recent date, gather The oldest Tamil grammar now extant,

<sup>1</sup> Vide ante, pp 209 and 217 2 Comparative Grammar, pp 50, 51

the Tol-Káppiyam, is assigned to one of his disciples the rise of a continuous Tamil literature belongs to a later The Sivaite and Vishnuite revival of the Bráhman apostles in Southern India, from the 8th century onwards, stirred up a counter movement on the part of the Jains Jain cycle Before that period, the Buddhism of the Dravidian kingdoms literature had modelled itself on the Jain type We shall see hereafter that early Buddhism in Northern India adopted the Prákrit or vernacular speech for its religious treatises. On the same analogy, Buddhism in Southern India, as the religion of the people, defended itself against the Brahmanical revival of the 8th century by works in the popular dialects The Dravidian Buddhists or Jains created a cycle of Tamil literature, anti-qth to 13th Bráhmanical in tone, stretching from the 9th to the 13th century century

Its first great composition, the Kural of Tiruvalluvar, not later Its great than the 10th century AD, is said to have been the work of Pariah a poet sprung from the Pariah or lowest caste It enforces the A D (2) old Sankya philosophy in 1330 distichs or poetical aphorisms, dealing with the three chief desires of the human heart, wealth, pleasure, and virtue To the sister of its author, a Pariah poetess, are ascribed many compositions of the highest moral excellence, and of undving popularity in Southern The Jain period of Tamil literature includes works on ethics and language, among them the Divakaram, literally the 'Day-making' Dictionary The period culminated in the Chintánianí, a romantic epic of 15 000 lines by an unknown The Jain Jain author Indeed, it is worthy of remark that several of the epic best Indian authors, whether Sanskrit or vernacular, have left no indication of their names. As it was the chief desire of an Indian sage to merge his individual existence in the Universal Existence, so it appears to have been the wish of many Indian men of letters of the highest type to lose their literary individuality in the school or cycle of literature to which they belonged

Contemporaneous with the Jain cycle of Tamil literature, The Tamil the great adaptation of the Ramavana was composed by Rama Kambar for the Dravidian races This work is a Tamil paraphrase or imitation, rather than a translation of the ancient Sanskrit epic A stanza prefixed to the work states that it was finished in the year corresponding to 886 AD stanza may itself be a later addition, and Bishop Caldwell, after a careful examination of the whole evidence, places the work after 1100

Tamil Sivaite hymno logies

Between that period and the 16th century, two encyclopædic collections of Tamil hymns in praise of Siva were gradually They breathe a deeply religious spirit, and the formed earlier collection (post 1200 AD) still holds its place in the affections of the Tamil speaking people The later collection was the work of a Sivaite devotee and his disciples, who devoted themselves to uprooting Jainism (aic 1500 AD) During the same centuries, the Vishnuite apostles were equally prolific in Tamil religious song Their Great Book of the Four Thousand Psalms constitutes a huge hymnology dating from the 12th century onwards After a period of literary inactivity, the Tamil genius again blossomed forth in the 16th and 17th centuries with a poet-king as the leader of the literary revival

Tamil I ishnuite hymno los

The Sittar Tamil poet-

theism

In the 17th century arose an anti Brahmanical Tamil literature known as the Sittar school The Sittars or sages were a Tamil sect who, while retaining Siva as the name of the One God, rejected everything in Siva-worship inconsistent with Their pure pure theism. They were quietists in religion, and alchemists They professed to base their creed upon the true in science original teaching of the Rishis, and indeed assumed to themselves the names of these ancient inspired teachers of They thus obtained for their poems, although written in a modern colloquial style, the sanction of a venerable antiquity. Some scholars believe that they detect Christian influences in works of the Sittar school it must be remembered that the doctrines and even the phraseology of ancient Indian theism and of Indian Buddhisin approach closely to the subsequent teaching and, in some

> 1 The following specimens of the Sittar school of Tanul poetry are taken from Bishop Caldwell's Comparative Grammar, p 148 The first is a version of a poem of Siva vakya, given by Mi R C Caldwell, the Lishop's son, in the Indian Antiquary for 1872. He unconsciously approximates the verses to Christian ideas, for example, by the title, 'The Shepherd of the Worlds,' which Bishop Caldwell states may have me int to the poet only King of the Gods.'

instances, to the very language of Christ 1

THE SHEIHERD OF THE WOPLDS

How many various flowers Did I, in bygone hours, Cull for the gods, and in then be nour strew In vain how many a prince I breathed into the air, And made, with many forms, obcisance duc

The Tamil writers of the 18th and 19th centuries are Modein classified as modern The honours of this period are divided Tamil This writers between a pious Sivaite and the Italian Tesuit, Beschi. missionary of genius and learning not only wrote Tamil prose Beschi of the highest excellence, but he composed a great religious epic in classical Tamil, which has won for him a conspicuous rank among Dravidian poets His work, the Tembávani, gives a Tamil adaptation of the narrative and even of the geography of the Bible, suited to the Hindu taste of the 18th century

Since the introduction of printing, the Tamil press has Recent been prolific A catalogue of Tamil printed books, issued in Stanstics Madras up to 1865, enumerated 1409 works In the single year 1882, no fewer than 558 works were printed in the vernaculars in Madras, the great proportion of them being in Tamil

While the non-Aryans of Southern India had thus evolved

Beating my breast, aloud How oft I called the crowd To drag the village car, how oft I stray d, In manhood's prime, to lave Sunwards the flowing wave, And, circling Saiva fanes, my homage paid

But they, the truly wise, Who know and realize Where dwells the Shepherd of the Worlds, will ne'er To any visible shrine, As if it were divine, Deign to raise hands of worship or of prayer

## THE UNITY OF GOD AND OF TRUTH

(sod is one, and the Veda is one, The disinterested, true Guru is one, and his initiatory rite one, When this is obtained his heaven is one, There is but one birth of men upon the earth, And only one way for all men to walk in But as for those who hold four Vedas and six shastras, And different customs for different people. and believe in a plurality of gods, Down they will go to the fire of hell !

## GOD IS LOVE

The ignorant think that God and love are different None knows that God and love are the same 1)id all men know that God and love are the same, They would dwell together in peace, considering love as God

**Aryan** languages of North Sanskut

a copious literature and cultivated spoken dialects out of their isolated fragments of prehistoric speech, a more stately ern India, linguistic development was going on in the Aryan north The achievements of Sanskrit as a literary vehicle in the various departments of poetry, philosophy, and science, have been described in chapter iv at such length as the scope But Sanskrit was only the most of this work permits famous of several Arvan dialects in the north. One of its eminent modern teachers defines it as 'that dialect which, regulated and established by the labours of the native grammarians, has led for the last 2000 years or more an artificial life, like that of the Latin during most of the same period in Europe' 1 The Aryan verniculars of modern India are the descendants not of Sanskrit, but of the spoken languages of the Aryan immigrants into the north The Brahmanical theory is that these ancient spoken diriects, or Prákrits, were corruptions of the purer Sanskrit European philology has disproved this view, and the question has arisen whether Sanskrit was ever a spoken language at all

Was San skut ever a vernacu lar?

Dr John Muu s affirmative answer

This question has a deep significance in the history of the Indian vernaculars, and it is necessary to present, with the utmost brevity, the views of the leading authorities on the subject Dr John Muir, that clarum et renerabile nomen in Anglo Indian scholarship, devotes many pages to 'reasons for supposing that the Sanskrit was originally a spoken language '-He traces the Sanskrit of the philosophical period to the earlier forms in the Vedic hymns, and concludes 'that the old spoken language of India and the Sanskrit of the Vedas were at one time identical '"

1 1065501 Benfey 5 VICH ,

ıffirma 111 -

Professor Benfey gives the results of his long study of the ques tion in even greater detail He believes that Sanskrit speaking migrations from beyond the Himalayas continued to follow one another into India down to perhaps the 9th century BC That Sanskrit became the prevailing Indian vernacular dialect throughout Hindustán, and as far as the southern borders of the Maratha country I nat it begin to die out as a spoken language from the 9th century BC, and had become extinct as a vernacular in the 6th century BC, its place being taken by derivative dialects or Prakrits But that it still lingered in the schools of the Brahmans, and that, about the 3rd century

<sup>&</sup>lt;sup>1</sup> Professor Whitney's Sanskrit Grammar, p ix Leipzig, 1879 Muir's Sanskrit lexts, vol 11 pp 144-160, ed 1874.

<sup>4</sup> Idem, p. 160, and Dr. Muir's long footnote, No. 181

BC, it was brought back into public life as a sacred language with a view to refuting the Buddhistic teachers who wrote in the vernacular or Prákrit dialects Professor Benfey also holds that about the 5th century AD Sanskrit had diffused itself over the whole of India as a literary language We know that a subsequent revival of Sanskrit for the Puranic or orthodox treatises of the Bráhmans, as opposed to the new doctrines of the reformers who used the vernacular, actually took place about the 10th century AD

Lassen inclines to the same general view He thinks that, Lassen's in the time of Asoka, the main body of Aryans of Northern view India spoke local dialects, while Sanskrit still remained the speech of Brahmans, and of dignitaries of State

Sanskrit scholars of not less eminence have come to the Sanskrit conclusion that Sanskrit was not at any time a vernacular never a spoken tongue. Professor Weber assigns it to the learned alone. He language thinks that the Prakrits, or Aryan vernaculars of Northern Weber's India, were derived directly from the more ancient Vedic view dialects, while Sanskrit was 'the sum of the Vedic dialects constructed by the labour and zeal of grammarians, and polished by the skill of learned men'. Professor Aufrecht Aufrecht agrees 'in believing that Sanskrit proper (\*e\* the language view of the epic poems, the law books, nay, even that of the Brahmanas) was never actually spoken, except in schools or by the learned'

The question has been finally decided, however, not by Evidence Sanskrit scholars in Europe, but by students of the modern from Aryan vernaculars in India During the past fourteen vears, a present Indian bright light has been brought to bear upon the language and speech literature of ancient India, by an examination of the actual speech of the people at the present day

Two learned Indian civilians, Mr Salmon Growse and Mr John Beames, led the way from not always concurrent points of view In 1872, Mr Beames' Comparative Grammar of the Modern Aryan Languages of India 1 opened up a new field of human knowledge, and began to effect for the Aryan dialects of the North, what Bishop Caldwell's great work accomplished The new for non-Aryan speech in Southern India Dr Ernest Trumpp's study of the ver nacular for modified some of Mr Beames' views Another learned 1872 1885 German officer of the Indian Government, Professor Rudolf

<sup>1</sup> Three volumes, Trubner & Co 1 he first volume was published in 1872, the last in 1879

Hærnle, further specialized the research by his Comparative Grammar of the Gaudian Languages (1880), with particular reference to the Hindi The same scholar and Mr George Grierson, of the Civil Service, have, during the present year (1885), jointly brought out the first part of a Comparative Dictionart of the Bihari Language, which will enable every European inquirer to study the structure and framework of a modern Aryan vernacular for himself These and other cognate works have accumulated a mass of new evidence, which settles the relationship of the present Aryan vernaculars to the languages of ancient India

Resul s disclosed by the ver naculars

They prove that those vernaculars do not descend directly from Sanskrit They indicate the existence of an Aryan speech older than Sanskrit, older, perhaps, than the Vedic hymns, from which the Sanskrit, the Piakiits or ancient spoken dialects of India, and the modein vernaculars were alike derived Passing beyond the Vedic period, they show that ancient Aryan speech diverged into two channels. The one channel poured its stream into the ocean of Sanskrit a language 'at once archaic and artificial,' elaborated by the Brahmanical schools 1. The other channel branched out into the Prakits or ancient spoken vernaculars The artificial Sanskrit (Samskrita, 1 e the perfected language) attained its complete development in the grammar of Panini (are 350 BC) 2 The Prakits (12 naturally evolved dialects) found their carliest extant exposition in the Panini and grammar of Vararuchi about the 1st century I C. But the Variation 4000 algebraic appoisms of Panini mark the climax of the labours of probably a long anticedent series of Sanskrit elaborators, while Vararuchi stands at the head of a long series

Diver gence of Sanskiit and Pra lп

The Prakrits s read - a h

The spread of the Arvans from Northern India is best marked by the southern advance of their languages three great routes of Prakrit speech to the southward weredown the Indus valley on the west, along the Ganges valley to the east, and through certain historical passes of the

of subsequent Piakrit grammaiians

<sup>1</sup> Harnle and Guerson Compa atr Dictionary of the Bihari I anguage, p 33 and 34 Secretariat Press, Calcutta 1885. It should be remem beind that Indian grammarians, when speaking of the Vedic language technically, do not call it Sanskrit, but Chhanlas They restrict the dinical application of Sanskrit to the scholastic language of the British mans, claborated on the lines of the culier Vedic

<sup>-</sup> Vi le ante, pp 100 et seq

Harnle , Comfarative Grammar of the Gandian Languages, p xvm et 17, Ed 1880

Vindhyas in the centre Between 500 BC and 500 AD, the Their western or Apabhramsa dialects of Prakrit had spread across three lines the Indus basin, and down the Bombay coast During the same period dialects of Eastern or Magadhí Prákrit had occupied the valleys of the Jumna and the Ganges Aryan tribes, speaking the Maharashtri and Sauraseni Prákrits, had poured through the Vindhyan passes, one of their great lines of march being that followed by the Jabalpur Railway at the present day The Maháráshtrí dialect reached as far south as (70a on the western coast The peninsula, to the south and east of the Maharáshtri linguistic frontier, was inhabited by the Dravidian or Paisachí-speaking races

By degrees the main Prakrits, or spoken Aryan dialects, Classifica differentiated themselves into local vernaculars, each occupying tion of Prakrits a more contracted area A series of maps has been compiled showing the stages of this process between 500 B.C and 1800 A.D.1 Various classifications have been framed, both of the modern vernaculars and of the ancient Prakrits Vararuchi, Vara the earliest Prakrit grammarian extant, enumerates four classes ruchi's four in the 1st century BC,—Mahárashtrí, now Marathi, 2 Sauraseni, now the Braj of the North-Western Provinces, Magadhi, now Bihári, and Paisáchi, loosely applied to outlying non-Aryan dialects from Nepal to Cape Comorin

Apart from the last named Paisáchí, the literary Prakrits The two really divide themselves between two great linguistic areas main Sauraseni, with the so-called Maharashtri, occupied the upper part of the North-Western Provinces, and sent forth offshoots through the Vindhya passes as far south as Goa Magadhi spread itself across the middle valley of the Ganges, with its brightest literary centre in Behar These were the two parents of the most highly developed of the 'broken' dialects of the Indus region, may for the moment be left out of sight

The Prakrits, or spoken Aryan dialects of ancient India, Prakrits received their first literary impulse from Buddhism. As the developed Brahmans elaborated Sanskrit into the written vehicle for their ists.

1 Prefixed to Hærnle and Grierson's Comparative Dictionary of the Bihail Language See also the Language Map appended to Hærnle's Comparative Grammar of the Gaudian Languages

<sup>2</sup> Mr Beames thinks that there is as much of the Magadhi and Saura soni type in the modern Marathi as there is of the Maharashtri Prakrit, Comparative Grammar of the Modern Arjan Languages, vol 1 p 34, ed 1872 He holds that Marathi reproduces the name rather than the sub stance of Maharashtri

VOL VI

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for their

orthodox religion, so the teachers of the new faith appealed to the people by works in the popular tongues The Buddhist missionaries to Ceylon, arc 307 BC, carried with them scriptures, the spoken Prakrit of the Gangetic kingdom of Magadha This dialect of Northern Indian became Páli, literally the series or catena of holy scripture in Ceylon While the early Buddhists thus raised the Eastern or Magadhí Prákrit of and by the Behar to a sacred language, the Jams made use of the Maharashtrí Prakrit of Western India for their religious treatises In this way, the two most characteristic of the spoken Aryan dialects of ancient India obtained a literary fixity, during the centuries shortly before and after the commencement of our

I he Prakrits าโรด remained Spoken languages

Juns

The Prakrits also remained the speech of the people, and underwent those processes of development, decay, and regeneration to which all spoken languages are subject. On the one hand, therefore, we have the literary Magadhí and Mahárashtri Prákrits of the beginning of the Christian era, the former embalmed in the Buddhist scriptures of Ceylon, the latter in the Jain sacred books of Western India other hand, we have the spoken representatives of these two ancient Prákrits in the modern vernaculars of Behar and of the Maratha country 1

Fvolution s et nacu lais from Prakr ts

Obscure interval. 400 1000 1 D

The evolution of the modern vernaculars from the ancient of modern Prákrits is involved in deep obscurity The curtain falls on the era of Prakrit speech within a few hundred years after the birth of Christ, and does not again draw up until the 10th century When it rises, Prákrit dialects have receded from the stage, and their place has been taken by the modern vernaculars During the dark interval, linguistic changes had taken place in the old Prakrits not less important than those which transformed Latin into Italian and Anglo-Saxon into Those changes are now being elucidated by the series of comparative grammars and dictionaries mentioned on pp 335-36 It is only practicable here to state the most important of the results

The old Prákrits were synthetical in structure The

<sup>&</sup>lt;sup>1</sup> This statement leaves untouched the question how far Marathi is the direct representative of Maharashtri, or how far it is derived from the Saurasem Prakrit As already mentioned, both the Saurasem and Mahar ashtri poured through the Vindhya passes into South Western India, and combined to form the second of the two main Prakrits referred to in the classification on a previous page

modern Aryan vernaculars of India are essentially analytical The During the eight centuries while the curtain hangs down synthetic Prakrits before the stage, the synthetic inflections of the Prákrits had worn out. The terminals of their nouns and verbs had given place to post-positions, and to the disjointed modern particles to indicate time, place, or relation function performed in the European languages by prepositions for the nouns are discharged, as a rule, by post-positions in the modern Indian vernaculars. The process was spontaneous, become and it represents the natural course of the human mind vernacu 'The flower of synthesis,' to use the words at once eloquent lars and accurate of Mr Beames, 'budded and opened, and when full-blown began, like all other flowers, to fade petals, that is its inflections, dropped off one by one, and in due course the fruit of analytical structure sprung up beneath it, and grew and ripened in its stead '1

As regards their vocabularies, the Aryan vernaculars of Three modern India are made up of three elements One class of elements in verna their words is named Tatsama, 'the same as' the corresponding culars, words in Sanskrit A second class is termed Taqbhava, 'similar Sanskrit in nature or origin' to the corresponding words in Sanskrit tatsamas
The third class is called Desaja, or 'country-born' This tadbhavas classification is an ancient one of the Indian grammarians, and Non it is so far artificial that it refers the modern vernaculars to Aryan Sanskrit standards, while we know that the modern vernaculars desayas were derived not from the Sanskrit, but from the Prakrits suffices, however, for practical purposes

The great body of modern Indian speech belongs to the Their second or Tadbhava class of words, and may be taken loosely Prakint frame to represent its inheritance from the old spoken dialects or work. Prákrits But the vernaculars have enriched themselves for literary purposes by many terms imported directly from the Sanskrit, to represent religious, philosophical, or abstract ideas and Sans These are the Tatsamas, 'the same as' in Sanskrit The dif-krit enrich ferent vernaculars borrow such 'identical' words from Sanskrit in widely varying proportions The strongest of the vernaculars, such as Hindí and Marathí, trust most to their own Tadbhava or Prakrit element, while the more artificial of them, like the Bengali and Uriya, are most largely indebted to direct importations of Sanskrit words

The third element in modern vernacular speech is the Desaja, or 'country-born' This represents the non-Aryan and

1 Mr Beames' Comparative Grammar of the Modern Aryan Languages of India, vol 1 p 45 (ed 1872)

Non Aryan element in the vei naculais.

other words not derived either from the Sanskrit or the Prakrits At one time it was supposed, indeed, that the modern vernaculars of India were simply made up of the Sanskrit of the Aryan settlers, modified by, and amalgamated with, the speech of the ruder non-Aryan races whom they subdued. philology renders this theory no longer tenable It has proved that Sanskrit played a comparatively unimportant function in the formation of those vernaculars It also tends to show that the non-Aryan element is less influential than was supposed Both in structure and in vocabulary the modern vernaculars of India are the descendants neither of the written Sanskrit, nor of the aboriginal tongues, but of the Prakrits or spoken dialects of the ancient Aryans

less im portant than formerly suppose I

Proportion of non Aiyan words

In regard to grammatical structure, this position is now firmly established But the proportion of aboriginal or non-Aryan words in the modern Indian vernaculars still remains undetermined The non-Aryan scholars, with Brian Hodgson and Bishop Caldwell at their head, assign a considerable influence to the non-Arvan element in the modern vernaculars 1 Dr Ernest Trumpp believes that nearly three-fourths of the in Smith, Sindhi words commencing with a cerebral are taken from some non-Aryan or Scythic language, which he would prefer to call Tatur He thinks, indeed, that there is very strong proof to show that the cerebral letters themselves were borrowed, by the Prákrits and modern Indian vernaculars, from some idiom in Cancetic anterior to the introduction of the Aryan languages into India Bishop Caldwell states that the non-Arvan clement, even in the Northern Indian languages has been estimated at one

veinica lars.

in Marathi tenth of the whole, and in the Marathi at one fifth 2 The real proportion sull auknown

Such generalizations are not accepted by the most eminent students of the Indo Aryan vernaculars Mr Beames strongly expresses his view that the speech of the conquering Arvans completely overmastered that of the aboriginal tribes early grammarians were wont to regard as Desaia, or non-Arvan all words for which they could not discover a Tatsama

<sup>1</sup> See Mr Brian Houghton Hodgson's Abon, in s of India, Calcutta, 1849, and pp 1-152 of vol 11 of his Miscellan ous Lstays (Trubner, 1880) Also the Rev Dr Stevenson's paper in the Journal of the Asiatu Socrets of Bombay

<sup>-</sup> Bishop Caldwell's Comparative Grammar of the Diazidian I angua, es. introd p 57 (ed 1875) Lassen held that the aboriginal tribes not only introduced 'peculiar varieties into the Prakrit dialects,' but also 'occa sioned very great corruptions of sound and form in the Indo Aryan lan s uages' (Indische Alterthumskunde, ii 1149) But the more recent inves tigations of Beames, Hærnle, and Grierson render these dieta doubtful

or Tadbhava origin But the more delicate processes of modern philology have reduced the number of this class, and tend still further to diminish it. The truth is, that until a complete examination is made with the new lights, both of the vocabulary and of the structure of the Indian vernaculars, no final conclusion can be arrived at

Dr Hærnle thus sums up the existing knowledge in regard Present to the group of Indian vernaculars on which he is the highest position authority 'That there are non-Aryan elements in the Bihan, question I have no doubt Considering that the Aryans immigrated into India, and absorbed large masses of the indigenous population into their ranks, it would be a wonder if no portion of the aboriginal languages had become incorporated into the Aryan speech But what the several constituents of that aboriginal portion are, and what proportion they bear to the Aryan element in the vernacular language, it is impossible at present to form any scientific opinion And what is more, it is impossible to say whether the assumed aboriginal portion of the Aryan speech was Dravidian, or some other language, such as Kolarian or Libeto Burman'1

1 Letter from Dr Rudolf Hærnle to the author, dated 28th May 1885 Dr Hærnle continues—' Attempts have been made now and then (e.g. in The Indian Antiquary) to show that some particular selected words of the North Indian languages are really Dravidian But these, even supposing they had been successful, would not enable any one to pronounce an opinion on the general question of the proportion of non Aryan words in the Gaudian languages As a matter of fact, some of these attempts, notably those referring to the genitive and dative post positions (ka, ke, li, etc), have been conspicuous failures It is now, I think, generally admitted that these post positions are thoroughly Aryan The truth is, that the way in which the question of the non Aryan element in the vernaculars should be approached has been hitherto almost entirely misconceived. A little consideration must convince any one that whatever aboriginal ele ments there may be in the vernaculars, they must have been incorporated into them before the present vernacular times, that is, in the period when Sanskrit and Prakiit flourished The question therefore properly stands thus-What are the aboriginal elements in Sanskrit and Prakrit? The vernaculars arose from Prakiit (and in a certain sense from Sanskiit) according to certain phonetic laws peculial to the Aryan languages. Hence it is next to useless to try to refer Bihari (or any Aryan) verna cular words direct to the Dravidian They must in the first place be referred back (by the well known Aryan phonetic laws) to their earlier forms in Prakrit and Sanskrit Only when this is done, the question can properly be asked whether they are Aryan or non Aryan And in order to decide this question, it will, among other points, have to be considered whether they possess correlates in the other Aryan languages (e.g. cf But there is every probability that there is a considerable number of words in Sanskrit and Prakrit which are not Aryan, but only

**F**ourfold composition of the verna culars

At present, therefore, we cannot advance further than the four following conclusions -First, that in grammatical structure and in their vocabularies, the modern analytical vernaculars of India represent the old synthetic Prakrits, after a (1) Prakrit process of development, decay, and regeneration, which has been going on, as the result of definite linguistic laws, during the past fifteen hundred years Second, that the modern vernaculars contain a non-Aryan element, derived from the

(2) Abori ginal élement

(3) Sans krit bor

towings

terms

element

so-called aborigines of India, but that this element has very slightly affected their grammatical structure, and that the proportion which it holds in their vocabularies is yet undeter-Third, that the modern vernaculars have enriched themselves, for literary and philosophical purposes, by direct (4) Persian and conscious borrowings from the Sanskrit Fourth, that they have also imported many terms connected with the administration, the land revenue, judicial business, and official life, from the Persian court languige of the Afghán and

The seven Aryan verna

Mughal dynasties

The Aryan vernaculars of modern India may be distributed according to their geographical areas into seven main lan guages

cula ci Smahi

Towards the north-western frontier, Sindhi is spoken by the descendants of the shepherd tribes and the scttlements who were left behind by the main stream of the prchistoric Aryan immigrants The Sindhi language abounds in words of non-Aryan origin, it contains very few Fatsamas, te Sanskrit words in their original shape, and it is almost destitute of an original literature. The Punjabí language is spoken in the valleys of the Indus and its tributaries Like the Sindhi, it contains few Tatsamas, 1e words borrowed directly from the Sanskrit

(2) I unjabi

(3) Guja r^thi 41 Hindi

Gujaráthí occupies the area immediately to the south of Punjabí, while Hindi is conterminous with the Punjabi on These two languages rank next to Punjabi in the east respect to the paucity of words borrowed directly from the They are chiefly composed of Ladbhava, ie words representing the Prakrits or old spoken dialects is spoken in the Districts to the south and cast of the Guja-

(5) Maia

Arjanized The question, however, has never been systematically or satisfactorily investigate I. Some attempts have latterly been made in this direction by showing that not a few Sanskrit words are, in reality, Prakrit words Sanskritized The next step will be to show that some Prakrit words are non Aryan words Prakritized (i.e. Aryanized);

ráthi frontier, Bengali succeeds to Hindí in the east of Bengal (6)Bengali and the Gangetic delta, while Uriya occupies the Mahanadi (7) Uriya delta and the coast of the Bay of Bengal from near the mouth of the Húgli to the northern Districts of Madras These three last-named vernaculars, Maráthí, Bengalí, and Uriya, are most largely indebted to modern and artificial importations direct from the Sanskrit

With the exception of Sindhí, the modern vernaculars of Vernacular India have each a literature of their own Some of them. literature indeed, possess a very rich and copious literature. This subject still awaits careful study The lamented Garcin de Tassy has Garcin de shown how interesting, and how rich in results, that study may Tassy be rendered His history of Hindi literature, and his yearly review of works published in the Indian vernaculars, form a unique monument to the memory of a scholar who worked under the disadvantage of never having resided in India But the unexhausted literary stores of the Indian vernaculars can only be appreciated by personal inquiry among the natives themselves The barest summary of the written and unwritten works in the modern Indian vernaculars is altogether beyond the scope of the present work. It can merely indicate the wealth of unprinted, and in many cases unwritten, works handed down from generation to generation, arranged in geographical areas The chapter will then conclude by selecting for description a few authors from three of the most advanced of the vernaculars - namely Hindí, Maráthi, and Bengali It will not touch on the Persian or Musalman literature of the Delhi Empire

As regards the isolated vernacular of Orissa, the present Vernacular writer has elsewhere given an analytical catalogue of 107 Uriyá writers authors, with a brief description of 47 Uriyá manuscripts of in Uriya, undetermined authorship <sup>3</sup> Several of the Uriya poets and theologians were prolific authors, and have left behind them a number of distinct compositions. Thus, Dina Krishna Dás (circ 1550 AD) was so popular a writer as to earn for himself the title of 'The Son of God Jagannath'. His separate works number fifteen, and embrace a wide range of subjects, from 'the Waves of Sentiment,' an account of the youthful sports of Krishna, to severe medical treatises. Another Orissa poet of the 16th century composed 23 works,

<sup>&</sup>lt;sup>1</sup> Histoire de la Littérature Hindoux et Hindoustanue, par M Guicin de Tassi, 3 vols large octavo, 2nd ed., Paris, 1870-71

<sup>-</sup> Hunter's Orissa, vol 11 App 15 cd 1872

on religious and metaphysical subjects, such as 'A Walk round the Sacred Enclosures of the Puri Temple,' and 'The Sea of the Nectar of Faith' The greatest of the Uniya poets, Upendra Bhani, a Rajá of Gumsar, belongs to nearly the same period He left behind him 42 collections of poems and treatises, some of them of great length

Messrs. Hærnle and Grierson have lately exhibited the local literature of Behar, and its sub-divisions, with admirable learning and distinctness 1 It must suffice here to refer the student to their lists of works in Bihári and the modern dialects of the Gaudian group

Kajputana literature

ın Bihari

An idea of the wealth of poetry current in Rajputána may be gathered from the following statement. The figures are taken from a manuscript note forwarded to the author by the Rev John Traill, Presbyterian missionary at Jaipur the ordinary Hindi works, such as translations from the Sanskrit the Ráiputs have a vast store of religious poetry and traditional song, still living in the mouths of the people. The works of only a single sect can be specified in detail

Dadu, a religious reformer, born at Ahmadabad in 1544,

Dreu

Sacred

single sect

left behind him a Bani, or body of sacred poetry extending to twenty thousand lines His life, by Jai Gopál, runs to three thousand lines Fifty-two disciples spread his doctrine throughout Ráiputana and Aimere, each of them leaving a large collection of religious verse. The literary fertility of the sect may be inferred from the works of nine of the poetry of a disciples The poems and hymnology of Gharib Das are said to amount to 32,000 lines, Jaisa is stated to have composed 124,000 lines, Prayag Das, 48,000 lines, Rapib II, 72,000 lines, Bakhna 11, 20,000 lines, Baba Banwaii Das, 12,000 lines, Shankar Das, 4400 lines, Sundar I)1s, 120,000 lines, and Madhu Das, 68,000 lines

Dadu hymno

These figures are stated on the authority of Mr Iraill and they are subject to the qualification that no European scholar has yet collected the writings of the sect given as reported by the natives among whom the poems are still current. It is to be regretted that so little has yet been done to edit the stores of veri acular literature in the Feudatory States of India. A noble task his before the more enlightened of the native princes, and in this task they would receive the willing assistance of English scholars now in India

logies

<sup>1</sup> Comparative Dictionary of the Bihari Language pp 38-42 (quarto Calcutta, 1885)

A very brief notice of the most distinguished authors in Selected Hindí, Maráthi, and Bengalí must conclude this chapter. For vernacular practical purposes, those three vernaculars represent the highest modern development of the modern Indian mind. This is, of course, exclusive of the Dravidian literature in the south of India, which has already been dealt with at the beginning of the chapter. The monastic literature of Burma is almost entirely a reproduction of the ancient Buddhist writings, and does not come within the scope of this work.

Hindí ranks, perhaps, highest among the Indian vernaculars Hindi in strength and dignity At the head of Hindí authors is authors Chand Bardai Chand was a native of Lahore, but lived at Chand the court of Prithwi Rája, the last Hindu sovereign of Delhi, Bardai, 12th cen at the close of the twelfth century 1 His poems are a col-tury A D lection of ballads in which he recites, in his old age, the gallant deeds of the royal master whom he had served, and whose sad fate he had survived They disclose the ancient Prákrit in the very act of passing into the modern vernacular In grammatical structure they still retain many relics of the synthetic or inflectional type, although the analytical forms of the modern vernaculars are beginning to crowd out these remnants of the earlier phase of the Indian speech Chand's ballads have been printed, but they also survive in the mouths of the people They are still sung by wandering bards throughout North-Western India and Raiputana, to near the mouths of the

The vernacular literatures derived their chief impulse, how-Later ever, not from court minstrelsy, but from religious movements Hindi Each new sect seems to have been irresistibly prompted to authors embody its doctrines in verse Kabír, the Indian Luther of 15th cen the fifteenth century, may be said to have created the sacred tury A D literature of Hindi<sup>2</sup> His Ramainis and Sabdas form an immense body of religious poetry and doctrine tollowing century, Sur Das of Mathura, Nabhají and 16th cen Keshava Dás of Bijapur, wrote respectively the Súrságar, the tuiy Bhaktamálá, and the Ramchandrika A brief notice of the Bhaktamala has already been given at page 208 In the 17th cen seventeenth century, Bihari Lal, of the ancient city of Amber tury near Jaipur, composed his famous Satsai, and Bundelkhand produced its prince of poets, Lal Kavi, the author of the Chhatra Prakas All these were natives of western

1 For Prithwi Raja, vide ante, chap x p 276

Indus, and to the frontier of Baluchistan

<sup>-</sup> For Kabir's work as a religious reformer, vide anti, pp 208, 218

Hindustán, except Kabir, who belonged to the Benaies district.

18th cen tury

The last troubled years of the Mughal dynasty in the eighteenth century brought about a silence in Hindi literature That silence was effectually broken by the introduction of the printing press in the nineteenth century It has been succeeded by a great outburst of Hindi activity in prose and verse Every decade now produces hundreds of Hindí publications, to some extent reproductions or translations of ancient authors, but also to a large extent original work

19th cen tury

Maratha The Marathás are scarcely more celebrated as a military licerature Their language is highly developed, than as a literary race and possesses structural complications attractive to the Indian Nam student The first martin poet of the his contemporary bout the end of the thirteenth century. Like his contemporary The first Marathi poet of fame was Nam Deva porary, Dayanoba the author of the celebrated Dayaneshwari, A D

Dnyanoba, he was deeply impressed with the spiritual aspects of life 13th cen tury 4 D

Indeed, almost all the Marathi writers are religious pocts About the year 1571, Sridhar compiled his huge Marathi

adaptation or paraphrase of the Sanskrit Puranas

Tukaram, 17th cen tiry A D

Marathi poetry reached its highest flight in the Auhangas or spiritual poems of lukaram or lukoba (circ 1609) This famous ascetic started life as a petty shopkeeper, but failing in retail trade, he devoted himself to religion and The object of his adoration was Vithoba, a corruption of Bishtu or Vishnu Lukaram was the popular poet in Western India of the reformed Vishnuite faith which Chaitany i had taught in Bengal He inveighed with peculiar unction and beauty against the riches of the world, which in his earlier years he had himself failed to sccure

May ur I andit, 18th cen tuly A D

About 1720, Mayur Pandit or Moropanth poured forth his copious song in strains which some regard as even more clevated than the poems of Tukaram

Besides its accumulations of religious verse, Marathi possesses a prose literature, among which the chief compositions are the Bakhars or Annals of the Kings It is also rich in love songs, and farcical poetry of a broad style of wit

Penguli

Bengali is, in some respects, the most modern of the Indian latera urc, vernaculars As a spoken language, it begins on the north, where Hindi ends on the south, that is to say, in the Cangetic From Rájmahal on the north to the valley below Behar Bay of Bengal, and from Assam on the east to Orissa on the

west, Bengali forms the speech of about 50 millions of people its geo in the valleys and deltas of the Brahmaputra and the Ganges graphical The language exhibits clearly marked dialectical modifications in the north, the east, and the west, of this great area for literary purposes, Bengali may be regarded as a linguistic Indeed, literary Bengali of the modern type is, to some extent, an artificial creation Much more than the and Hindí, it has enriched itself by means of words directly im- linguistic features ported from the Sanskrit Such words not only supply the philosophical, religious, and abstract terms of Bengali literature, but they enter largely into the every-day language of the people I his is to some extent due to the circumstance that the Bengalis have very rapidly adopted western ideas With the introduction of such ideas arose the necessity for new terms, and for these terms, Bengali writers naturally turned towards the Sanskrit

The process has not been confined, however, to philosophic Sanskritiz works Even in poetry, the best Bengali writers of the present ing ten dency of dry affect a more classical style than that of their predecessors Bengali from the fourteenth to the eighteenth century. In 17 lines of Bengali verse taken from a contemporary periodical, the Banga dai shana, there are only six or seven words which are not Sanskrit importations 'If we progress in this direction a century longer,' writes a native author, 'the Bengali language will be distinguishable from the Sanskrit only by the case terminations and mood and tense terminations '1 The framework of the colloquial language still continues to be derived from the Prákrit, although Sanskrit terms are diffusing themselves even among the spoken language of the educated classes

Bengah literature commences with the vernicular poets of Three the fourteenth century During its first two hundred years, Bengah Benguli song was devoted to the praises of Krishna, and the literature, loves of the young god In the sixteenth century two great (1) 14th to revolutions, religious and political, took place in Bengal 16th century In the political world, the independent Afghan dynasty of Bengal succumbed to the advancing Mughal power, and

1 The Literature of Bengal, by Arcy Dae, p 43, Calcutta, 1877 This interesting volume is based on the more elaborate Bengali work of Pandit Ramgati Nyaratna A complete treatment of the subject is still a desider atum, which it is hoped that Bengali research will before long supply Mr Dac, whose volume has been freely used in the following pages, would confer a benefit both on his countrymen and on European students of the Indian vernaculars, by undertaking the task

Bengal was finally incorporated as a Province of the Delhi Empire

(2) 16th to 18th cen tury

In religion, a reformation of the Sivaite religion was effected under Brahman impulses, and Krishna worship receded from its literary pre eminence During the next two hundred and fifty years Benguli poetry found its chief theme in the praises of Kali or Chandi, the queen of Sivi, who is alike the god of Destruction and of Reproduction Early in the nineteenth century, European influences began to impress themselves on Bengali thought Bengali literature accordingly entered upon a third period, the period through which it is still passing, and which corresponds to the imported Western civilisation of India in the nineteenth century

(3) 19th century

Bidy ipiti Thakur, 14th cen \*urs

Putting aside Jayadeva of Birbhúm, the Sanskrit singer in the twelfth century, Bengali poetry commences with Bidyapati Thákur, a Brahman of Tirhut Bidyapati adorned the court of King Sivasinha of 1 irhut in the fourteenth century, and a deed of gift, still existing, proves that he had made his fame before 1400 AD Although popularly claimed as the Chaucer of Bengal, he wrote in what must now be regarded as a Bihari rather than a Bengali dialect, and recited in learned verse the loves of Radha and Krishna About the same period Chandi Das, 15th Das, a Birbhum Bráhman, took up the sacred strun in the Bengali tongue Originally a devotee of the goddess Chandi, queen of Swa he was miraculously converted to the worship of Krishna, whose praises he celebrated in a less learned, but more forcible colloquial style. To these two poets and their followers, Krishna was a lover rather than a deity, and his mistress Rádha, more of a pastoral beauty than a goddess. But their poetry constantly realizes that beneath the human amours of the divine pair, lies a deep spiritual significance This didactic side of their poetry may be illustrated by three verses of Bidyapati to Krishna under his title of Madhavi. 'The Honeyed One'

century

Chandi

Verses liv <sup>1</sup> idyapati

## A HYNN 10 KRISHNA

'O' Madbava' our final stay, The Saviour of the world Thou art, In mercy look upon the weak, To Thee I turn with trustful heart

Half of my life in sleep has past, In illness-boyhood-years have gone. In pleasure's vortex long I roamed. Alas ' forgetting Thee, the One

Unnumbered beings live and die, They rise from Thee and sink in Thee, (Thou uncreate and without end!) Like ripples melting in the sea 1

At the beginning of the sixteenth century, the great religious Religious reformer Chaitanya<sup>2</sup> gave a more serious turn to the poetry of move ments of Bengal He preached the worship of Vishnu, and the doctrine the 16th of saving faith in that deity Krishna was the pastoral incar-century nation of the god, but the Vishnuism taught by Chaitanyá The spiritualized the human element in the amours which the Revival earlier poets had somewhat warmly sung Chaitanyá declared the spiritual equality of mankind, and combated the cruel distinctions of caste His doctrine amounted to a protest against the Hinduism of his day, although it has been skilfully incorporated by the later Hinduism of our own The opposition, excited by Chaitanya's Vishnuite reformation, took the form of a revival of the worship of Siva and his queen

There were thus, in the sixteenth century, two great religious The movements going on in Bengal, the one in favour of Vishnu, Revisal the second person of the Hindu triad, and the other in favour of Siva, the third person of that trinity The more serious aspect which Chaitanya give to Vishnuism did not lend itself to popular song so easily as the human loves of Krishna. celebrated by the earlier Vishnuite poets On the other hand. the counter revival of Sivaism accepted as its objects of adora Benguli tion, some form or other of the Goddess of Destruction and Straite poetry Reproduction under her various names 3 of Uma, Párvatí. Durgá, Kali, or Chandí These names suggested alike the terrors and the mercies of the Queen of Siva, and appealed in a special manner to a people dwelling amid the stupendous catastrophes of nature in a deltaic Province like Bengal

The result was an outburst of Bengali song, which took as Kirtibas its theme the praises of Chandi, the wife of Siva. Kirtibás Ojha, 16th century Ojha, a Bráhman of Nadiya District in the sixteenth century. marks the transition stage Kirtibas drew his inspiration from The transi the Sanskrit epics, and his great work is the Bengali version of tion poet the Ramayana His translation is still recited by Ghattaks or bards at a thousand religious and festive gatherings every year 

<sup>1</sup> Slightly altered from the rendering of Mr Dae's Literature of Bengal. p 60 (Bost & Co , Calcutta, 1877)

<sup>2</sup> I ide ante, pp 219-21 3 For the different names of the wife of Sun, and the aspects of the goldess which these names connote, v de ante, pp 211, 212

His Ben gah Ram ayana

re touching from later poets of the classical or Sanskritizing school, but an old copy of 1603 proves that Kirtibas wrote in a strong colloquial style, with a ring and rhythm of peculiar The Rámáyana recites the achievements of the heroic incarnation of Vishnu, and Kirtibás Ojhá may therefore be claimed as a Vishnuite poet But in reality his work marks the Sanskrit revival which gave the impulse to the Sivaite or Chandi poets of the next two and a half centuries

Swaite and to 18th century

Wakunda Kam

These Sivate poets kept possession of Bengali literature during Chandle poets, 16th the 250 years which elapsed before the commencement of the third or present period First among them was Makunda Ram Chakravarti a Brahman of Bardwan District, and a con temporary of Kirtibas Ojha in the 16th century driven from his home by the oppressions of Muhammadan officers, and his verses give a lifelike picture of the Muhammadan land settlement of Lower Bengal All classes, he says, were crushed with an equal tyranny fallow lands were entered as arable, and by a talse measurement three fourths of a bigha were taxed as a full bigha In the collection of the revenue, the oppressions were not less than in the assessment The treasury officers deducted more than one supre in seven for short weight and exchange. The husbandmen fled from their lands and threw their cattle and goods into the markets, 'so that a rupee worth of things sold for ter annas' Makunda Ram's family shared the common ruin, but the young poet, after a wandering life, found shelter as tutor in the family of Binkura Deb, a powerful landholder of Birbhum and Midnapur He was honoured with the title of Kabi Kankan, or the Tewel of Bards, and wrote two great poems besides minor songs

The story (f Kalketu by Ma \unda Lam

His most popular work is the story of Kalketu, the hunter Kálketu, a son of Indra, King of Heaven, is born upon earth as a poor hunter. In his celestral existence he had a devoted wife, and she, too, is born in this wor'd, and becomes his faithful companion throughout their allotted earthly career Their mortal births had been brought about by the goddess Chandi, queen of Siva, in order that she might have a city founded and dedicated to herself. The poor hunter and his wife, Fullorá, after years of hardship, are guided to a buried treasure by their kind patroness, (handi With this, the hunter builds a city, and dedicates it to the goddess misled by a wicked adviser, he goes to war with the King of Kalinga on the south, is defeated, and cast into prison due time Chandi rescues her foolish but faithful servant

last the hunter and his true wife die and ascend to heaven He lives again as the son of Indra, while Fullora again becomes his celestial spouse

The other poem of Makunda Ram narrates the adventures The Sii of a spice merchant, Dhanapati, and his son, Srímanta Sadá-manta Sadagar of gar A celestial nymph, Khulloná, is sent down to live on Makunda earth as penance for a venial offence. She grows into a Ram beautiful girl, and is wedded by the rich merchant, Dhanapati, who has, however, already a first wife Before the marriage can be consummated, the king of the country sends off the merchant to Eastern Bengal to procure a golden cage for a favourite bird The bride is left with his elder wife in the family home upon the banks of the Adjai, a river which separates Bírbhúm and Bardwan Districts in South-Western Bengal A wicked handmaid excites the jealousy of the elder wife, and the girl-bride is condemned to menial offices, and sent forth as a goat herd to the fields The kind goddess Chandi, however converts the elder lady to a better frame of mind, the girl-bride is received back, and on the return of her husband becomes his favourite wife. In due time she bears him a son, Srímanta Sadagar, the hero of the subsequent story

The king next sends the merchant for spices to Ceylon, and Voyage his voyage down the great rivers of Bengal and across the sea wa the Hugh and is vividly described From the towns mentioned on his route, Adi Ganga it appears that in those days the water-way from Bardwan to Ceylon, 16th cen District and the neighbouring country, to the Bay of Bengal, turn ly by the Húgh as far down as Calcutta, and then struck south-eastward by what is now the dead river of the Adí-(rangá 1 The poor merchant is imprisoned by the King of Cevlon, and there languishes until he is sought out by his brave son, Srímanta Sadagar, from whom the poem takes its Srimanta is also seized, and led out to execution by the cruel king But the kind goddess Chandí delivers both father and son, and the beautiful Khulloná receives back with 10y her lost treasures from the sea.

In the 17th century, the second of the two great Sanskrit Kasi Ram epics, the Mahábharata, was translated by Kasi Rám Dás Das, 17th This poet also belonged to Bardwan District His version still holds its place in the affections of the people, and is chanted by professional bards throughout all Bengal The Bengali more tender episodes are rendered with feeling and grace, and

<sup>1</sup> See article HLGII RIVER in The Imperial Gautteer of India

but the fiery quarrels and heroic spirit of the Sanskrit original lose much in the Bengali translation

Bengah poets of the 18th century Ram Prasad Sen The 18th century produced two great Bengalí poets. In 1720, Rám Prasád Sen, of the Vaidya caste, was born in Nadiyá District. Sent at an early age as clerk to a Calcutta office, he scribbled verses when he should have been casting up accounts, and was reported for punishment by the chief clerk. The head of the business read the rhymes, dismissed the poet, but assigned to him a pension of Rs 30 a month With this he retired to his native village, and wrote poetry for the rest of his life. Ram Prasád was a devout Tantrik or worshipper of the wife of Siva, and his poems consist chiefly of appeals to the goddess under her various names of Kalí, Sakti, etc. His songs however are more often complaints of her cruelty than thanksgivings for her mercies.

The Court of Nadiya 18th cen tury

The little Hindu court of Nadij i then formed the centre of learning and literature in Bengal, and the Raji endowed Rain Prasad with 33 acres of rent free land. The grateful poet in return dedicated to the prince his Kabiranjan, or version of the tale of Bulja Sundar. The fame of this version has, however, been eclipsed by the rendering of the same story by a rival poet Bharat Chandra. Two other well known works, the Káli Kirtan and the Krishna Kurtan, in honour respectively of Káli and Krishna, with many minor poems have also come down from the pen of Rám Prasád.

Bharr Chan 12 Rai

The other great Bengal poet of the 18th century was Bharat Chandra Rái, who died 1760 The son of a petty Rajá, he was driven from his home by the oppressions of the Raja of Bardwan, and after many adventures and imprisonment, obtained the protection of the chief native officer of the French Settlement at Chandarnagar The generosity of the Rája of Nadıyá2 afterwards raised him to comfort, and he devoted his life to three principal poems. His version of the Bidja Sundar is a passionate love poem, and remains the accepted rendering of that tale to the present day Káli interposes at the end to save the life of the frui heroine His other two principal poems, the Annadá Mangal and the Mansinha, form continuations of the same work, and, like it, are devoted to the glorification of the queen of Siva under her various names

With the printing press, and the Anglo Indian School, arose

Dae's I tterature of Bongal, p. 147 (Calcutta, 1877)

<sup>2</sup> Mr Dae says, inadvertently, the Raja of Bardwan

a generation of Bengalis whose chief ambition is to live by the Recent pen The majority find their career in official, mercantile, or Bengali literature, professional employment But a large residue become writers 19th cen of books, and Bengal is at present passing through a grand tury literary climacteric Nearly 1300 works per annum are pub lished in the vernacular languages of Lower Bengal alone It is an invidious task to attempt to single out the most distinguished authors of our own day Amid such a climax of literary activity, much inferior work is produced. But it is not too much to say that in poetry, philosophy, science, the novel and the drama, Bengali literature has, in this century, produced masterpieces without rivals in its previous history departments it has struck out entirely new lines prose practically dates from Ram Mohan Rái, and Bengali journalism is essentially the creation of the third quarter of the present century 1

As Bengali poetry owed its rise in the 14th century, and its Bengali fresh impulse in the 16th, to outbursts of religious song, so prost, 19th Bengali prose is the offspring of the religious movement headed by the Rajá Ram Mohan Rái in the 19th This great theistic reformer felt that his doctrines and arguments required a more serious vehicle than verse. When he died in 1833, he at once received the position of the father of Bengali prose, a position which he still enjoys in the grateful memories of his countrymen<sup>2</sup> Of scarcely less importance, however, in the creation of a good prose style, were two rivil authors born in 1820 Akkhu Kumar Datta enforced the theistic doctrines of the Brahma Sama; with indefatigable ability in his religious journal, the Tatwahodhim Patrika Reprints of his articles still rank as text books of standard Bengali prose Chandra Vidvasagar, also born in 1820, devoted himself to social reform upon orthodox Hindu lines The enforced celibacy of widows, and the abuses of polygamy, have formed the subject of his life-long attacks

An older worker, Iswar Chandra Gupta born 1809, took the lead in the modern popular poetry of Bengal His fame has

<sup>1</sup> From no list of 19th century Bengali authors should the following names be omitted - kain Mohan Ru Allhu Kumar Ditta, Iswar Chandra Vidyasagar, Iswar Chandra (supta Madhu Sudan Datta, Hem Chandra Banarji, Bankim Chandia Chattarji, Dino Bandhu Mitra, and Nabin Chandra Sen

<sup>&</sup>lt;sup>2</sup> Raja Ram Mohan Rai (Rummohun Koy) is also well known for his Inglish works, of which it is pleasant to record that a collected reprint is now appearing under the editorship of I abu Gegendra Chandra Ghose, M A (Calcutta, 1885)

Modern bengah poets, 19th cen tury

Madhu Sudan Datta, 1828-1875

The Bengah Drama been eclipsed, however, by Midhu Sudan Datta, born 1828, who now ranks higher in the estimation of his countrymen than any Bengalí poet of this or any previous age Madhu Sudan's epic, the Meghnád Badh Kábya, is reckoned by Bengalí critics as second only to the masterpieces of Valmiki, Kalidása, Homer, Dante, and Shakspeare This generous appreciation is characteristic of the catholic spirit of Hinduism For Madhu Sudan Datta became a Christian, lectured as professor in a Christian college, went to England, and returned to Bengal only to die, after a too brief career, in 1875 His epic relates the death of Meghnad or Indrajít, greatest of the sons of Ravana, and takes its materials from the well-known episode in the Rámáraia Among Bengali poets still living, Hem Chandra Banarji occupies perhaps the highest place of honour

In the Bengali drama, Dina Bandhu Mitra, born 1829, died His first and greatest work, the A'il 1873, led the way Daspan or Mirror of Indigo, startled the community by its picture of the abuses of indigo planting a quarter of a century ago It was translated into English by the well known missionary and philanthropist, the Rev James Long formed the ground of an action for libel, ending in the fine and imprisonment of the latter gentleman In prose fiction. Bunkim Chandra Chattarji, born 1838, ranks first The Bengalí novel is essentially a creation of the last half century, and the Durgesh Nandim of this author has never been surpassed But many new novelists, dramatists, and poets are now establishing their reputation in Bengal, and the force of the literary impulse given by the State School and the printing press seems still unabated It is much to be regretted that so little of that intellectual activity has flowed into the channels of biography and critical history

The mean ing of this chapter This chapter has dealt at some length with the vernacular literature of India, because a right understanding of that literature is necessary for the comprehension of the chapters which follow. It concludes the part of the present book which treats of the struggle for India by the Asiatic races. In the next chapter the European nations come upon the scene. How they strove among themselves for the mastery will be briefly narrated. The conquest of India by any one of them formed a problem whose magnitude not one of them appreciated. The Portuguese spent the military resources of their country, and the religious enthusiasm of their Church, in the vain

attempt to establish an Indian dominion by the Inquisition and Assaults the Sword This chapter has shown the strength and the indigenous extent of the indigenous civilisation which they thus ignorantly civilisation and unsuccessfully strove to overthrow

The Indian races had themselves confronted the problems for which the Portuguese attempted to supply solutions from without One religious movement after another had swept across India, one philosophical school after another had presented its explanation of human existence and its hypothesis of a future life A popular literature had sprung up in every The Portuguese attempt to uproot these native growths, and to forcibly plant in their place an exotic civilisa tion and an exotic creed, was foredoomed to failure any such attempt the Dutch and the French wisely abstained One secret of the success of the British power has been its English non interference with the customs and the religions of the non interference people

## CHAPTER XIV

EARLY EUROPEAN SETTLEMENTS (1498 TO 181H CENTURY AD)

guese m Jn ha Vasco da Gama, 1498

The Portu THE Muhammadan invaders of India had entered from the Her Christian conquerors approached by sea from north west From the time of Alexander to that of Vasco da the south Gama, Europe held little direct intercourse with the East An occasional traveller brought back stones of powerful kingdoms and of untold wealth, but the passage by sea was scarcely dreamed of, and by land, wide deserts and warlike tribes lay Commerce, indeed struggled overland and via the between Red Sca, being carried on chiefly by the Italian cities on the Mediterranean, which traded to the ports of the Levant 1 But to the Europeans of the 15th century, India was an unknown land, which powerfully attracted the imagination of spirits stimulated

> 1 The following is a 1st of the most noteworths early travellers to the i ast, from the 9 h centary to the estab ishment of the Portuguese as a conquering power in India in the 16th flc Aiab geographers will be found in Sir Henry Lators first volumes of the Indian Historians The standard European authority is The h , of Ser Mai ( Pow th Vin tian, edited by Colonel Henry Yule, Ch. 2 vols second edition, The author's best thanks are due to Council Vule for the assistance Ic has kindly afforded both here and in the e wholes of Inc Imperial Gazetteer of India, which came within the scope of Colonel Yule's re The authorities for the more ancient travellers and Indian geographers are, as already s ated, W'Crind'es Meat I ne and Arrian, his Kie tae, and his Aart atton of the Ir th ain Sea which originally appeared in the Inaian Intiquary and were republished by Messis The Commerce and Nazzation of the Anat nts in the Indian Ocean, by Dr William Vincent, Dean of Westimuster (2 vols quarto, 1807), may still be perused with interest, although Di Vincent's materials have been supplemented by fuller and more accurate knowledge 883 A D King Alfred sends Sighelm of Sherburn to the shrine of Saint

> Thomas in India The ne of the shine is doubtful, see chap in 851-916 Sulaiman and Abu Zaid, whose travels furni hed the Relations of Remand

912-30 The geographer Vas udi

1159 73 Rabbi Benjamin of Tudela, visted Persian Gulf, reported on

1260-71 The brothers Nicolo and Maffeo Polo, father and uncle of Marco Polo, make their first trading venture through Central Asia

by the renaissance, and ardent for discovery The materials for this period have been collected by Sir George Birdwood in his admirable official Report on the Old Records of the India Office (1879), to which the following paragraphs are largely indebted The history of the various European settlements will be found in greater detail, under their respective articles, in The Imperial Gazetteer of India

In 1492, Christopher Columbus sailed westwards under the Poitig ie-e Spanish flag to seek India beyond the Atlantic, bearing with voyages him a letter to the great Khan of Tartary He found America instead An expedition under Vasco da Gama started from Lisbon five years later, in the opposite, or south-eastern, direction It doubled the Cape of Good Hope, and cast anchor off the city of Calicut on the 20th May 1498, after a protracted voyage of nearly eleven months An earlier Portuguese emissary, Coyilham, had reached Calicut overland about 1487

- 1271 They started on their second journey, accompanied by Marco Polo and about 1275, arrived at the Court of Kublai Khan in Shangtu, whence Marco Polo was entrusted with several missions to Cochin China, Khanbulig (Pckin) and the Indian Seas
- 1292 Friar John of Monte Corvino, afterwards Archbishop of Pekin, spent thirteen months in India on his way to China
- 1304-78 Ibn Batuta, an Arab of Tangiers, after many years in the Last, attached himself to the Court of Muhammad Tughlak at Delhi, 1334-42, whence he was despatched on an I mbassy to China
- 1316-30 Odorico di Pordenone, a Minorite fiiar, tiavelled in the East and through India by way of Persia, Bombay, and Surat (where he collected the bones of four missionaires martyred in 1321), to Malabar the Coromandel coast, and thence to China and Libet
- 1328 Friar Jordanus of Severac, bishop of Quilon
- 1338-49 John de Mangnolli, a Franciscan finar, on his return from a mission to China, visited Quilon in 1347, and made a pilgumage to the shrine of St. Thomas in India in 1349
- 1,27-72 Sir John Mandeville, wrote his tiavels in India (supposed to be the first printed Linglish book, London, 1499), but beyond the Levant his travels are invented or borrowed
- 1419-40 Nicolo Conti, a noble Venetian, travelled throughout Southern India and along the Bombry coast
- 1442-44 Abd ur Razzak, during an embissy to India, visited Calicut, Mingalore, and Vijayanigar, where he was entertained in state by the llindu sovereign of that kingdom
- 1468-74 Athanasius Nikitin, a Russian, trivelled from the Volgt through Centrul Asia and Persia, to Gujarat, Cumbay, and Chaul, whence he proceeded inland to Bidar and Golconda
- 1494-99 Hicronimo di Santo Stefano, a Genoese, visited the port of Malabu and the Coromandel coast as a merchant adventurer, and after proceeding to Ceylon and Pegu, sailed for Cambay
- 1503 08 Travels of Ludovico di Varthema In the Hak'uyt Serus

State of India on arrival of Portu guese

From the first, Da Gama encountered hostility from the Moors, or rather Arabs, who monopolized the sea-borne trade, but he seems to have found favour with the Zamorin or Hindu Ráiá of Malabar An Afghán of the Lodi dynasty was then on the throne of Delhi, and another Afghan king was ruling over Bengal Ahmadabád formed the seat of a Muhammadan dynasty in The five independent Muhammadan kingdoms of Ahmednagar, Bijapur, Elichpur, Golconda, and Bidar had partitioned out the Deccan But the Hindu Rájá of Vijayanagar still ruled as paramount in the south, and was perhaps the most powerful monarch to be found at that time in India, not excepting the Lodí dynasty at Delhi

Raia of Calicut s letter, 1498

After staying nearly six months on the Malabar coast, Da Gama returned to Europe, bearing with him the following letter from the Zamorin to the King of Portugal - 'Vasco da Gama, a nobleman of your household, has visited my kingdom and has given me great pleasure. In my kingdom there is abundance of cinnamon, cloves, ginger, pepper, and precious What I seek from thy country is gold, silver, coral, and scarlet' The safe arrival of Da Gama at I isbon was cele brated with na ional rejoicings as enthusiastic as those which had greeted the return of Columbus. If the West Indics belonged to Spain by priority of discovery, Portugal might claim the East Indies by the same right. The Portuguese mind became intoxicated by dreams of a mighty oriental empire

l'ortuguese expechtion 1500

The early Portuguese navigators were not traders or private adventurers, but admirals with a royal commission to conquer territory and to promote the spread of Christianity expedition, consisting of thirteen ships and twelve hundred soldiers, under the command of Cabral, was despatched in 'The sum of his instructions was to begin with preach 1500 ing, and if that failed, to proceed to the sharp determination of the sword' On his outward voyage, Cabral was driven by stress of weather to the coast of Brazil. Ultimately he reached Calicut, and established factorics both there and at Cochin, in spite of active hostilities from the natives

I ortuguese in eastern 1600

In 1502, the King of Portugal obtained from Pope Mexsupremacy ander vi a bull constituting him 'I ord of the Navigation, cen 1500 Conquests, and Trade of Ethiopia, Arabia, Persia, and India' In that year Vasco da Gama sailed again to the East, with a fleet numbering twenty vessels. He formed an alliance with the Rájás of Cochin and Cananore against the Zamorin of Calicut, and bombarded the latter in his palace. In 1503, the creat Alfonso d'Albuquerque sailed to the East in command of

one of three expeditions from Portugal In 1505, a large fleet of twenty-two sail and fifteen thousand men was sent under Francisco de Almeida, the first Portuguese Governor and Viceroy of India

In 1509, Albuquerque succeeded as Governor, and widely Albu extended the area of Portuguese influence Having failed in querque takes Goa, an attack upon Calicut, he in 1510 seized Goa, which has 1510 since remained the capital of Portuguese India Then, sailing round Ceylon, he captured Malacca, the key to the navigation of the Indian archipelago, and opened a trade with Siam and penetrating into the Persian Gulf and the Red Sea, returned to Goa only to die in 1515 In 1524, Vasco da Gama came out to the East for the third time, and he too died at Cochin, in 1527 For exactly a century, from 1500 to 1600, the Portuguese enjoyed a monopoly of Oriental trade 1 'From Japan and the Spice Islands to the Red Sea and the Cape of Good Hope, they were the sole masters and dispensers of the treasures of the East, while their possessions along the Atlantic coast of Africa and in Brazil completed their maritime empire '2

But the Portuguese had neither the political strength Cruclius nor the personal character necessary to maintain such an of Portu Empire Their national temper had been formed in their India contest with the Moors at home They were not traders, but knights errant and crusaders, who looked on every pagan as in enemy of Portugal and of Christ Only those who have read the contemporary narratives of their corquests, can realize the superstition and the cruelty with which their history in the Indies is strined

Albuquerque alone endeavoured to conciliate the goodwill Albu of the natives, and to live in friendship with the Hindu querque's princes, who were naturally better pleased to have the Portu-concilia guese, as governed by him, for their neighbours and allies, tion than the Muhammadans whom he had expelled or subdued The justice and magnanimity of his rule did as much to extend and confirm the power of the Portuguese in the East, as his courage and the success of his military achievements

<sup>&</sup>lt;sup>1</sup> For a full account of the Portuguese in India, and the curious phases of society which they developed, see uticle Gos, The Imperial Gazettees of India Also for local notices, see articles DAMAN, DIU, BASSEIN, CATICLI

<sup>&</sup>lt;sup>2</sup> This and the following paragraphs are condensed from Sir George Birdwood's official Report on the Miscellaneous Old Records in the India Office, dated 1st November 1878 (folio, 1879)

In such veneration was his memory held, that the Hindus of Goa, and even the Muhammadans, were wont to repair to his tomb, and there utter their complaints, as if in the presence of his shade, and call upon God to deliver them from the tyranny of his successors

'The cruelties of Soarez, Sequeyra, Menezes, Da Gama,

Later Viceloye,

then bravery and succeeding viceroys, drove the natives to desperation, and encouraged the princes of Western India in 1567 to form a league against the Portuguese, in which they were joined by the King of Achin' But the undisciplined Indian troops were unable to stand against the veteran soldiers of Portugal, 200 of whom, at Malacca, routed 15,000 natives with artillery When, in 1578, Malacca was again besieged by the King of Acl in, the small Poituguese garrison destroyed 10,000 of his men, and all his cannon and junks. Twice again, in 1615 and for the last time in 1628, Malacca was besieged, and on each occasion the Achinese were repulsed with equal bravery

But the increased military forces sent out to resist these attacks proved an insupportable drain on the revenues and

Spanish influences, 1550 population of Portugal

In 1580 the Portuguese crown was united with that of Spain, under Philip II This proved the ruin of the maritime and commercial supremacy of Portugal in the East terests of Portugal in Asia were henceforth subordinated to the European interests of Spain In 1640, Portugal again became a separate kingdom. But in the meanwhile the Dutch and English had appeared in the Fastern Seas, and before their indomitable competition, the Portaucse empire of the Indics withered away as rapidly as it had sprung up. The period of the highest development of Portuguese commerce was probably from 1590 to 1610 on the eve of the subversion of their commercial power by the Dutch, and when their political admini s ration in India was at its lowest depth of degradation this period a single flect of Portuguese merchantmen sailing from Goa to Cambay or Surat would number as many as 150 or 250 carracks Now, only one Portuguese ship sails from I isbon to Goa in the year 1

Dovanfall of Lorta gue e in Indi 1639 1739

The Dutch besieged Goa in 1603, and again in 1639. Both attacks were unsuccessful on land, but the Portuguese were gradually driven off the sea. In 1683, the Maráthás plundered to the gates of Goa. The further history of the Portuguese in India is a miserable chronicle of pride, poverty, and sounding

4 Kej reduced, without verification, from Sir George Birdwood's Report,

titles The native princes pressed upon them from the land. On the sea they gave way to more vigorous European nations

The only remaining Portuguese possessions in India are Gon, Portuguese Daman, and Diu, all on the west coast, with a total area of 2365 Possessions in 1881 square miles, and a total population of 475,172 in 1881 1 The general Census of 1871 also returned 426 Portuguese in British India, not including those of mixed descent About 30,000 of the latter are found in Bombay ('Portuguese' half castes), and 20,000 in Bengal, chiefly in the neighbourhood of Dacca and Chittingong The latter are known as Firinghis, and, excepting Mixed dethat they retain the Roman Catholic faith and European sur scendants names, they are scarcely to be distinguished either by colour, language, or habits of life from the natives among whom they live

The Dutch were the first European nation who broke through The Dutch the Portuguese monopoly During the 16th century, Bruges, in India, Antwerp, and Amsterdam became successively the great em poriums whence Indian product, imported by the Portuguese, was distributed to Germany, and even to England At first the Dutch, following in the track of the English, attempted to find their way to India by saying round the northern coast of Europe and Asia William Barents is honourably known as the leader of three of these arctic expeditions, in the last of which he purished

The first Dutchman to double the Cape of Good Hope Dutch was Cornelius Houtman who reached Sumatra and Bantam India Com in 1506 Forthwith private companies for trade with the park East were formed in many parts of the United Provinces, but in 1602 they were all amalgamated by the States General into 'The Dutch Fast India Company' Within fifty years the Dutch had established factories on the continent of

1 This number, 475,172, is the 'actual population of all the Portugue e Settlements in India, as shown in the Ceneral Statement No 1 of the Census of Portuguese India tal en on the 17th Lebruary 1881 The same table shows the nominal' population at 481,467. Do h these returns differ somewhat from the totals obtained from the detailed tables showing the males and females, age, and c vil condition of the people. Thus, the total obtained for Gor is 144,449 from the detailed statements, while the General Statement No 1 of the Portuguese Settlements shows an 'actual population for Got of 413,698 and a 'nominal population of 420,808 Similar differences on a smaller scale may be detected in the general and detailed statements of the Settlement of Daman. In both cases, the separate articles in The Imperial Garittee of India follow the detailed tables of male and female, age, and civil condition, while in general statements of population for Portuguese India, the general totals assued under the authority of the Portuguese Government are accepted

Their progress, 1619

India, in Ceylon, in Sumatra, in the Persian Gulf, and in the Red Sea, besides having obtained exclusive possession of the In 1619 they laid the foundation of the city of Batavia in Java, as the seat of the supreme government of the Dutch possessions in the East Indies, which had previously At about the same time the Dutch disbeen at Amboyna covered the coast of Australia, while in North America they founded the city of New Amsterdam or Manhattan, now New York

Dutch ın eastern 1700

During the 17th century the Dutch were the foremost marisupremicy time power in the world Their memorable massacre of the seas 1600- English at Ambovna, in 1623, forced the British Company to retire from the Eastern Archipelago to the continent of India, and thus led to the foundation of our Indian Empire long navil wars and bloody battles between the English and the Dutch within the narrow seas were not terminated until William of Orange united the two countries in 1689 Eastern Archipelago the Dutch ruled without a rival, and expelled the Portuguese from almost all their territorial possessions In 1635 they occupied Formosa, in 1640 they took Malacca, a blow from which the Portuguese never recovered, in 1647 they were trading at Sadras, on the Palár river, in 1651 they founded a colony at the Cape of Good Hope, as a half-way station to the East, in 1652 they built their first Indian factory at Palakollu, on the Madras coast, in 1658 they captured Jaffnapatam, the last stronghold of the Portuguese in Ceylon Between 1661 and 1661 the Dutch wrested from the Portuguese all their earlier settlements on the pepper bearing coast of Malabar, and in 1669 they expelled the Portuguese from St Thome and Macassar

1 heir brilliant progres, 1635-69

Their short sighted Dilicy

Struped of their Indian possea Sinns, 1759 1811

The fall of the Dutch colonial empire resulted from its short-sighted commercial policy. It was deliberately based upon a monopoly of the trade in spices and remained from first to last destitute of sound economical principles Like the Phænicians of old, the Dutch stopped short of no acts of cruelty towards their rivals in commerce, but, unlike the Phoenicians, they failed to introduce their civilisation among the natives with whom they came in contact The knell of Dutch supremacy was sounded by Clive, when in 1750 he attacked the Dutch at Chinsurah both by land and water, and forced them to an ignominious capitulation In the great French wars from 1793 to 1811, Fingland wrested from Holland every one of her colonies, although Java was restored in 1816, and Sumatra exchanged for Malacca in 1824

At present, the Dutch flag flies nowhere on the mainland of Dutch India But quaint houses, Dutch tiles and carvings, at Chinsurah, relics in Negapatam, Jaffnapatam, and at petty ports on the Coromandel and Malabar coast, with the formal canals in some of these old Settlements, remind the traveller of scenes in the Netherlands The passage between Ceylon and the mainland still bears the name of the Dutch governor, Palk In the Census of 1872, only 70 Dutchmen were enumerated throughout all British India, and 79 in 1881

The earliest English attempts to reach India were made by Enry the North-west passage. In 1496, Henry VII granted letters adven patent to John Cabot and his three sons (one of whom turers, was the famous Sebastian) to fit out two ships for the ex-1496 1596 ploration of this route. They failed, but discovered the island of Newfoundland, and sailed along the coast of America from Labrador to Virginia. In 1553, the ill fated Sir Hugh The Willoughby attempted to force a passage along the north of North west passage, Europe and Asia, the successful accomplishment of which 1553 1616 has been reserved for a Swedish savant of our own day. Sir Hugh perished miserably, but his second in command, Chancellor, reached a harbour on the White Sea, now Archangel. Thence he penetrated by land to the court of the Grand Duke of Moscow, and laid the foundation of 'the Russia Company for carrying on the overland trade between India, Persia, Bokhara, and Moscow'

Many Fnglish attempts were made to find a Northwest Later passage to the East Indies, from 1576 to 1616. They have attempt the imperishable names of Frobisher, Davis, Hudson, and Baffin. Meanwhile, in 1577, Sir Francis Drake had circumnavigated the globe, and on his way home had touched at Ternate, one of the Moluccas, the king of which island agreed to supply the English nation with all the cloves which it produced

The first modern Englishman known to have visited the Stephen-Indian Peninsula was Thomas Stephens, in 1579 William of first Englishman in Malmesbury states, indeed, that in S83 Sighelmus of Sherborne, India, sent by King Alfred to Rome with presents to the Pope, proceeded thence to 'India,' to the tomb of St Thomas, and brought back jewels and spices But, as already pointed out, it by no means follows that the 'India' of William of

<sup>1</sup> For local notices of the Dutch in India, see articles SADRAS, PALA KOLLU, CHINSGRAH, NEGAPATAM, PALKS PASSACE, etc., in their respective volumes of *The Imperial Gratter of India* 

Malmesbury meant the Indian peninsula Stephens (1579) was educated at New College, Oxford, and became rector of the Tesuit College in Salsette His letters to his father are said to have roused great enthusiasm in England to trade directly with India

Fitch, Leedes, 1583

In 1583, three English merchants, Ralph Fitch, James New-Newherry, berry, and Leedes, went out to India overland as mercantile The jealous Portuguese threw them into prison at Ormuz, and agun at Goa At length Newberry settled down as a shopkeeper at Goa, Leedes entered the service of the Great Mughal, and Fitch, after a lengthened perc grination in Ceylon, Bengal, Pegu, Siam, Malacca, and other parts of the East Indies, returned to England 1

The defeat of the 'Invincible Armada' in 1588, at which time the crowns of Spain and Portugal were in union, gave a fresh stimulus to maritime enterprise in England, and the successful vovage of Cornelius Houtman in 1596 showed the way round the Cape of Good Hope, into waters hitherto monopolized by the Portuguese

I nglish Last India Com panies

The following paragraph on the early history of the English East India Companies is condensed, with little change, from Sir George Birdwood's official report? In 1599, the Dutch, who had now firmly established their trade in the East, raised the price of pepper against us from 35 per lb to 6s and 8s The merchants of London held a meeting on the 22nd September at Founders' Hall, with the Lord Mayor in the chur, and agreed to form an association for the purposes of trading directly with India Queen Elizabeth also sent Sir John Mildenhall by Constantinople to the Great Mughal to apply for privileges for an English Company December 1600,3 the English East India Company was in corporated by royal charter under the title of 'The Governor and Company of Merchants of London trading to the Last Indies.' The original Company had only 125 shareholders, and a capital of £70,000, which was raised to £400,000 in 1612-13, when voyages were first undertaken on the joint stock account

Fust charter, 31-t De cember 1600

> Courten's Association, known as 'The Assada Merchants,' from a factory subsequently founded by it in Madagascar, was

<sup>1</sup> Condensed from Report on Old Lecords in the India Office, pp 75-77

<sup>4 (</sup> andensed from Report on Old Records in the India Office, pp 77 et seg

<sup>4</sup> Auber gives the date as the 30th December, Inalysis of the Constitution of the Last India Company, by Peter Auber, Assistant Secretary to the Honourable Court of Directors, p ix (London, 1826)

established in 1635, but, after a period of internecine rivalry, Later was united with the London Company in 1650 In 1654-55, panies, the 'Company of Merchant Adventurers' obtained a charter 1635, from Cromwell to trade with India, but united with the 1655, original Company two years later A more formidable rival subsequently appeared in the English Company, or 'General Society trading to the East Indies,' which was incorporated under powerful patronage in 1698, with a capital of 2 millions 1698, sterling According to Evelyn, in his Diary for March 5, 1698, 'the old East India Company lost their business against the new Company by 10 votes in Parliament, so many of their friends being absent, going to see a tiger baited by dogs' However, a compromise was effected through the arbitration of Lord Godolphin 1 in 1708, by which the amalgamation of 1708 the 'London' and the 'English' Companies was finally carried Amalga out in 1709, under the style of 'The United Company of Company, Merchants of England trading to the East Indies' About 1709 the same time, the Company advanced loans to the English Government aggregating £3 200,000 at 5 per cent interest, in return for the exclusive privilege to trade to all places between the Cape of Good Hope and the Straits of Magellan 2

The early voyages of the Company from 1600 to 1612 are English distinguished as the 'separate vovages,' twelve in number \oyage, lne subscribers individually bore the expenses of each voyage, and reaped the whole profits. With the exception of the fourth, all these separate vovages were highly prosperous, the profits hardly ever falling below 100 per cent After 1612, the voyages were conducted on the joint stock account

The English were promptly opposed by the Portuguese First But James Lancaster, even in the first voyage (1601-2), Linglish voyages, established commercial relations with the King of Achin and 1601-06 it Prinman in the island of Sumatra, as well as with the Malaccas, and at Bantam in Java, where he settled a 'House of Trade' in 1603 In 1604 the Company undertook their second voyage, commanded by Sir Henry Middleton, who extended their trade to Banda and Ambovna The success of these voyages attracted a number of private merchants to the pusiness, and in 1606, James I granted a licence to Sir Edward Michelborne and others to trade 'to Cathay, China, I man, Corea, and Cambaya' But Michelborne, on arriving

<sup>1</sup> Under the award of Lord Godolphin, by the Act of the 6th of Queen Anne, in 1708, cap 17 Auber's Analysis, p vi

<sup>-</sup> Mill, Hist Brit Ind, vol 1 p 151 (cd 1840) Auber gives a detailed statement of these loans, from 1708 to 1793, Analysis, p x1 etc

in the East, instead of exploring new sources of commerce like the East India Company, followed the pernicious example of the Portuguese, and plundered the native traders among the islands of the Indian Archipelago. He in this way secured a considerable booty, but brought disgrace on the British rame, and seriously hindered the Company's business at Bantam.

V oy 1ge-

In 1608, Captain D Middleton, in command of the fitth voyage, was prevented by the Dutch from trading at Banda but succeeded in obtaining a cargo at Pulo Way this year also, Captain Hawkins proceeded from Surat, as envoy from James 1 and the East India Company, to the court of the Great Mughal He was graciously received by the Emperor (Jahángir), and remained thiec years at Agra 1609 Captain Sharpay obtained the giant of free trade at Aden, and a cargo of pepper at Priaman in Sumatra. In 1600, also, the Company constructed the dockyard at Deptford, which was the beginning, observes Sir William Monson, 'of the increase of great ships in England' In 1611, Sir Henry Middleton, in command of the sixth voyage, arrived before Cambay He resolutely fought the Portuguese, who tried to beat him off, and obtained important concessions from the Native In 1610-11, also, Captun Hippon, commanding the seventh vovage, established agencies at Masulipatam, and in Siam, at Patania or Patany on the Malay Peninsula, and at Pettipollee We obtained leave to trade at Surat in 1612

58a<sup>13</sup>y fi\_h , 1615 In 1615, the Company's fleet, under Captun Best, was attacked off Swally, the port of Surat, at the mouth of the river Tanti, by an overwhelming force of Portuguese 1 But the assailants were utterly defeated in jour engagements, to the astonishment of the natives, who had hitherto considered them invincible. The first fruit of this decisive victory was the pre-eminence of our factory at Surat, with subordinate agencies at Gogra, Ahmadabad, and Cambay. Trade was also opened with the Persian Gulf. In 1614, an agency was established at Ajmere by Mr. Fdwards of the Surat factory. The clief seat of the Company's government in Western India remained at Surat until 1684-87, when it was transferred to Boinbay.

1 For the date and account of the engagement, see *bomlay Garetteer*, 51 PAI and BROACH, vol 11 pp 77, 78 (bombay Government Press, 1877)
Order 15sued, 1684, transfer commenced, 1686, actually carried out, 1687 *bomlas Gu etters*, vol 11 p. 98

In 1615, Sir Thomas Roe was sent by James 1 as am-Sir bassador to the court of Jahangír, and succeeded in placing Roe, 1615 the Company's trade in the Mughal dominions on a more favourable footing In 1618, the English established a factory at Mocha, but the Dutch compelled them to resign all pretensions to the Spice Islands In that year also, the Company fuled in its attempt to open a trade with Dabhol, Baticola, and Calicut, through a want of sincerity on the part of the Zamorin or Calicut Rájá In 1619 we were permitted to establish a factory and build a fort at Jask, in the Persian Gulf

In 1619, the 'Treaty of Defence' with the Dutch, to Treaty prevent disputes between the English and Dutch companies, with Dutch, was ratified When it was proclaimed in the East, the Dutch 1619 and English fleets, dressed out in all their flags, and with yards manned, saluted each other But the treaty ended in the smoke of that stately salutation, and the perpetual strife between the Dutch and English Companies went on as bitterly Up to this time, the English Company did not as ever possess any territory in sovereign right in the 'Indies,' except ing in the island of I antore or Great Banda The island was governed by a commercial agent of the Company, who had under him thirty Europeans as clerks and warehousemen This little band, with two hundred and fifty armed Malays, constituted the only force by which it was protected In the islands of Banda and Pulo Roon and Rosengyn, the English Company had factories, at each of which were ten agents At Macassar and Achin they possessed agencies, the whole being subordinate to a head factory at Bantam in Tava

In 1620, the Dutch, notwithstanding the Trenty of Defence, English concluded the previous year, expelled the English from Pulo by Dutch, Roon and Lantore, and in 1621 from Bantam in Java. The 1620 fugitive factors tried to establish themselves, first at Pulicat, and afterwards at Masulipatam on the Coromandel coast, but were effectually opposed by the Dutch In 1620, the Portuguese also attacked the English flect under Captun Shillinge, but were defeated with great loss From this time the estimation in which the Portuguese were held by the natives declined, while that of the English rose In 1620, too, the English Company established agencies at Agra and Patna In 1622 they joined with the Persians, attacked and took Ormuz from the Portuguese, and obtained from Shah Abbas a grant in perpetuity of the customs of Gombroon This was the first time that the English took the offensive against the Portuguese

Masuli patam factory, 1622 The mas sacre of Amboyna, 1623

In the same year, 1622, our Company succeeded in re establishing their factory at Masulipatam

The massacre of Amboyna which made so deep an impression on the English mind, marked the climax of the Dutch hatred to us in the eastern sens. After long and bitter recriminations, the Dutch seized our Captain Towerson at Amboyna, with 9 Englishmen, 9 Japanese, and 1 Portuguese sailor, on the 17th February 1623 They tortured the prisoners at their trial, and found them guilty of a conspiracy to surprise The victims were executed in the heat of passion, and their torture and judicial muider led to an outburst of indignation in England Ultimately, commissioners were appointed to adjust the claims of the two nations, and the Dutch had to pay a sum of £3615 as satisfaction to the heirs of those who had suffered But from that time the Dutch remained masters of Lantore and the neighbouring islands They monopolized the whole trade of the Indian Archipelago, until the great naval wars which commenced in 1793 1624 the English, unable to oppose the Dutch withdrew nearly all their factories from the Archipelago, the Maliy Peninsula, Siam, and Java Some of the factors and agents retired to the island of Lagundy, in the Strait of Sunda, but were forced by its unhealthiness to abandon it

English duven out of Archi pelago. 1024.

I nglish tetire to India. 1625 Their early fac ones, 1625-53.

Trale to P ngal, 1634

Driven out of the Eastern Archipelago by the Dutch, and thus almost cut off from the lucrative spice trade, the English betook themselves in earnest to founding settle ments on the Indian seaboard In 1625-26, the Fnglish established a factory at Armagaon on the Coromandel coast. subordinate to Masulipatam 1 But in 1628, Vasulipatam was, in consequence of the oppressions of the native governors, for a time abandoned in favour of Aringgion, which now mounted 12 guns, and had 23 factors and agents 1629, our factory at Bantam in Java was re established as an agency subordinate to Surat, and in 1630, Armagaon, reinforced by 20 soldiers, was also placed under the presidency of Surat. In 1632, the English factory was re established at Masulipatam, under a grant, the Golden Firman,' from the King of Golconda In 1634, by a farman dated February 2. the Company obtained from the Great Mughal liberty to trade in Bengal But their ships were to resort only to Pippli

1 These brief chronological abstracts follow, with a few omissions, ad litions and corrections of dates, Sir George Birdwood's official Report on the Old Records in the India Office (folis), p 83 For notices of the Indian towns mentioned, see the arrives in The Imperial Casetteer of India

in Orissa, now left far inland by the sea. The Portuguese were in the same year expelled for a time from Bengal

In 1634-35, the English factory at Bantam in Java was Bantan again raised to an independent presidency, and an agency Piesi was established at Tatta, or 'Scindy' In 1637, Courten's 1635 Association (chartered 1635) settled agencies at Goa, Baticola, Karwar, Achin, and Rájapur Its ships had the year before plundered some native vessels at Surat and Diu disgraced the Company with the Mughal authorities (who could not comprehend the distinction between the Company and the Association), and depressed the English trade with Surat, while that of the Dutch proportionately increased

In 1638, Armagaon was abandoned as unsuited for commerce, Madiaand in 1639, Fort St George or Madraspatnam (Chennapat founded 1639 nam) was founded by Francis Day, and the factors at Armagáon were removed to it It was made subordinate to Bantam in Java, until rused in 1653 to the rank of a Presidence 1640, the Company established an agency at Bussorah, and Trade having much extended, the i factory at Káinar Company's yard at Deptford was found too small for their ships, and they purchased some copyhold ground at Blackwall, which at that time was a waste marsh, without an inhabitant Here they opened another dockyard, in which was built the Royal George, of 1200 tons, the largest ship up to that time constructed in England

Our factory at Hugli in Bengal was established in 1640, and Hugh at Balasor in 1642 In 1645 in consequence of professional 1640 services rendered by Mr Gabriel Boughton, surgeon of the Hopewell, to the Emperor Shah Jahan, additional privileges were granted to the Company, and in 1646, the Governor of Bengal, who had also been medically attended by Boughton, made concessions which placed the factories at Bulisor and Húglí on a more favourable footing In 1647, Courten's Association established its colony at Assada, in Madagascur Mada In 1652, Cromwell declared war against the Dutch on account green, of their accumulated injuries against the English Company In 1653, the English factory at Lucknow was withdrawn No record has been found of its establishment In 1658, the Company established a factory at Kasımbazar (spelt 'Castle Bazaar' in the records), and the English establishments in

2 4 VOL VI

<sup>1</sup> Bishop Caldwell derives Madras from the Telugu maduru, the sur rounding wall of a fort Its native name is obtained from Chennappa, the father in law of the Nayakkur or Chief of Chinglepat Comparatize Grammar of the Dravidian Language, p 10 (ed 1875)

Bengal were made subordinate to Fort St George or Madras, instead of to Bantam

Rombay ceded, 1661

Our fac

Bantam

Ma irre

bombay

Persian Gulf

Bengal

tories,

1685

In 1661. Bombay was ceded to the British crown as part of the dower of Catharine of Braganza, but was not delivered up until 1665 King Charles II transferred it to the East India Company, for an annual payment of £,10, in 1668 of the Western Presidency was removed to it from Surat in The Company's establishments in the East Indies 1684-87 then consisted in 1685 of the Presidency of Bantam in Java, with its dependencies of Jambi, Macassir, and minor agencies in the Indian Archipelago, Fort St George and its dependent factories on the Coromandel coast and Bengal, Surat, with its affiliated dependency of Bombry, and factories at Broach, Ahmadabad, and other places in Western India, also at Gombroon (Bandar Abbas) and Bussorah in the Persian Gulf and Euphrates valley In 1661, the factory at Biliapatam was In 1663, the English factories established at Patna, founded Balasor, and Kasimbazar were ordered to be discontinued, and purchases to be made only at Hugli In 1664 Surat was pulaged by the Maratha Swapi, but Sir George Ovenden bravely defended the English factory, and the Mughal Em-Jic or in admiration of his conduct, granted the Company an

bengal separated from Matters

1601

In 1681 Bengal was separated from Madras, and Mr Hodges appointed 'agent and governor' of the Company's affairs 'in the Bay of Bengal, and of the factories subordi nate to it, at Kasimbazar, Patná, Balisor, Maldah, and Duca A corporal of approved fidelity, with 20 soldiers, to be a currel to the agent's person at the factory of Hugh, and to act against interlopers' In 1684, Sir John Child was made 'Captain-General and Admiral of India ' and Sir John Wyborne, 'Vice Admiral and Deputy Governor of Bombay' In 1687, the seat of the Presidency was finally transferred from Surat to Bombay In 1686, Kasimbazar, in common with the other English factories in Bengal, had been condemned to confiscation by the Nawab Shaista Khan The Hugh factory was much oppressed, and the Company's business throughout India suffered from the wars of the Mughals and Maráthas

exemption from customs for one year

Bombay a Presi dency, 1987

Sir John Child was appointed 'Governor-General,' with full power in India to make war or peace, and was ordered to

'overnor

<sup>15</sup> ir George Birdwood's Report on the Old Record of the India Office, p. 85, anotes this title from the MSS. It is therefore, nominally, a century older than is usually supposed, but Hastings was the first real Governor General, 1771

proceed to inspect the Company's possessions in Madras and Bengal, and arrange for their safety On the 20th of Decem-Calcutta ber 1686, the Company's Agent and Council were forced by founded, the exactions of the Muhammadan Governor to quit their factory at Húgh They retired down the river to Sutanati (Calcutta) Tegnapatam (Fort St David) was founded in this year (1686), and definitively established in 1691-92

In 1687-88, the Company's servants, broken in spirit by the English oppressions of the native Viceroy, determined to abandon their resolve factories in Bengal In 1688, Captain Heath of the Resolution, Bengal in command of the Company's forces, embarked all its servants 1687-88 and goods, sailed down the Húglí, and anchored off Balasor on the Orissa coast They were, however, soon invited to return by the Emperor, who granted them the site of the present city of Calcutta for a fortified factory In 1689, our factories at Vizagapatam and Masulipatam on the Madras coast were seized by the Muhammadans, and the factors were massacred

But in this same year, the Company determined to consoli- The Comdate their position in India on the basis of territorial sovereignty, backs on to enable them to resist the oppression of the Mughals and territorial Marathas With that view, they passed the resolution, which sway, was destined to turn their clerks and factors throughout India into conquerors and proconsuls 'The increase of our revenue is the subject of our care, as much as our trade, 'tis that must muntain our force when twenty accidents may interrupt our trade, 'tis that must make us a nation in India Without that we are but a great number of interlopers, united by His Majesty's royal charter, fit only to trade where nobody of power thinks it their interest to prevent us And upon this account it is that the wise Dutch, in all their general advices that we have seen, write ten paragraphs concerning their government, their civil and military policy, warfare, and the increase of their revenue, for one paragraph they write concerning trade' The subsequent history of the English East India Company and its settlements will be nurrited in the next chapter

The Portuguese at no time attempted to found a Company, Other but kept their eastern trade as a royal enterprise and monopoly India The first incorporated Company was the English, established Com in 1600, which was quickly followed by the Dutch in 1602 panies' The Dutch conquests, however, were made in the name of the Dutch, State, and ranked as national colonies, not as semi-commercial

I rench,

Next came the French, whose first East India possessions Company was founded in 1604, the second, in 1611, the third, in 1615, the fourth (Richelieu's), in 1642, the fifth (Colbert's), in 1644 The sixth was formed by the union of the French East and West India, Senegal, and China Companies under the name of 'The Company of the Indies.' in The exclusive privileges of this Company were, by the French king's decree suspended in 1769, and the Com pany was finally abolished by the National Assembly in 1796

French posses sions

Dupleix, the governor of the French factories and possessions on the Madras coast, first conceived the idea of founding an Indian Empire upon the ruins of the Mughal dynasty, and for a time the French nation successfully contended with the English for the supremacy in the East The French settlements in India are still five in number, with an area of 203 square miles, and a population of 273,611 souls. The brilliant history of our great national rivals is summarized under the article French Possissions in The Imperial Gazetteer of India, vol iv (2nd edition)

Danish,

The first Danish East India Company was formed in 1612, and the second in 1670 The settlements of Iranquebar and Serampur were both founded in 1616, and acquired by the Figlish by purchase from Denmark in 1845. Other Danish settlements on the munland of India were Porto Novo, with Eddova and Holcheri on the Malabar coast The Company started by the Scotch in 1695 may be regarded as having been still-born The 'Royal Company of the Philippine

Spanish,

Secteh,

Islands,' incorporated by the King of Spain in 1733, had little to do with India proper

German, or Ostend Company

Of more importance was 'The Ostend Company, incorporated by the Emperor of Austria in 1722, 1 its factors and agents being chiefly persons who had served in the Dutch and English Companies This enterprise forms the subject of Carlyle's 'Third Shadow Hunt' of the Emperor Karl vi2 'The Kaiser's Imperial Ostend Fast India Company, which convulsed the diplomatic mind for seven years to come, and Described made Europe lurch from side to side in a terrific manner. proved a mere paper Company, never sent ships, only produced Diplomacies, and "had the honour to be"' Carlyle's

by Carlyle

<sup>1</sup> The deed of institution is dated 17th December 1722

<sup>2</sup> History of Friedrich II of Prussia, called I reder to the Great, by Thomas Carlyle, vol 1 pp 555 557 (3rd cd 1859)

picturesque paragraphs do not disclose the facts The Ostend Company formed the one great attempt of the German Empire. then with Austria at its head, to secure a share of the India It not only sent ships, but it founded two settlements in India which threatened the commerce of the older Furopean Companies One of its settlements was at Coblom Its Indian or Covelong, between the English Madras and the Dutch settle Sadras, on the south-eastern coast The other was at Bankıpur, or 'Banky-bazaar,' on the Húglí River, between the English Calcutta and the Dutch Chinsura Each of these German settlements was regarded with hatred by the English Threaten and Dutch, and with a more intense fear by the less successful ingattitude French, whose adjacent settlements at Pondicherri on the Ostend Madras coast, and at Chandarnagar on the Húglí, were also Company threatened by the Ostend Company

So far from the German association being 'a mere paper Company' never sending ships, as Carlyle supposes, its formation was the result of a series of successful experimental voyages In 1717, Prince Fugene ordered two vessels to sail for India, under the protection of his own passports. The profits of Its expen the expedition led to others in succeeding years, and each mental voyages, voyage proved so fortunate, that the Austrian Emperor found 1717-22 it necessary to protect and consolidate the property of the idventurers by a charter in 1722. This deed granted to the Ostend Company more favourable terms than any of the other Furopean Companies enjoyed Its capital was one million Their giert sterling, and so great were the profits during its first years success that its shares brought in 15 per cent The French, Dutch, and English Companies loudly complained of its factories, built at their very doors, both on the Hugh River and on the VIndras const These complaints were warmly taken up by their respective Governments in Europe

For the object which the Emperor Karl vi had in view Pohitical was political not less than commercial. Prince Eugene had objects of urged that an India Company might be made to form the Company nucleus of a German fleet, with a first-class naval station at Ostend on the North Sea, and another at Fiume or Irieste on the Adriatic. Such a fleet would complete the greatness of Germany by sea as by land, and would render her independent of the Maritime Powers, especially of England and Holland. The Empire would at length put its ports on the Baltic and the Adriatic to a proper use, and would thenceforth exert a commanding maritime influence in Europe

The existing Maritime Powers objected to this, and the

Ostend Company opposed by the Maritime Powers,

and sacri Pragmatic Sanction, 1727

Ostend Company became the shuttlecock of European The Dutch and English diplomacy for the next five years felt themselves particularly aggrieved They pleaded the After long and loud altertreaties of Westphalia and Utrecht cations, the Emperor sacrificed the Ostend Company in 1727 to gain the acceptance of a project nearer his heart—the Pragmatic Sanction for the devolution of his Imperial heritage nced to the To save his honour the sacrifice at first took the form of a suspension of the Company's charter for seven years the Company was doomed by the Maritime Powers They made attempts shareholders did not, however, despair to transfer their European centre of trade to Hamburg. Irieste, Tuscany, and even Sweden

Ostend **settle** ment des royed, 1733,

Meanwhile the other European Companies in Bengal had taken the law into their own hands They stirred up the Muhammadan Government against the new-comers 1733, the Muhammadan military governor of Hugli picked a quarrel, in the name of the Delhi Emperor, with the little German settlement at Bankipur, which by about eight miles below Hugh town on the opposite side of the river Muhammadan troops besieged Bankipur, and the garrison, reduced to fourteen persons after a despairing resistance against overwhelming numbers, abandoned the place, and set The Ostend agent lost his right arm by a sail for Europe cannon ball during the attack, and the Ostend Company, together with the German interests which it represented, became thenceforward merely a name in Bengal settlement, Bankipur or 'Banky-bazaar,' has long disappeared from the maps, and the author could only trace its existence from a chart of the last century, aided by the records of that period, and by personal inquiry on the spot 1. The Ostend Company, however, still prolonged its existence in I urope a miserable struggle, it became bankrupt in 1784, and was finally extinguished by the arrangements made at the renewal of the English East India Company's charter in 1793

nd disap peared from the 1 120

Ostend Company bankrupt, 1784. and extin guished, 1793 Prussian ( m Janu >

What the Emperor of Austria had failed to effect, Frederick the Great, King of Prussia, resolved to accomplish got possession of East Friesland in 1744, he tried to convert

1 There is an interesting series of visa labelled The Ostenders in the India Office See also the Abbe Raynal's History of the Settlements and Irade of the Furopeans in the East and West Indies, Book v (pp 176-182, vol 11 of the 1776 edition), and the article BANKIPUR on the Hugli in The Imperial Gazetteer of India

its capital, Embden, into a great northern port. Among other Asiatic measures, he gave his royal patronage to the Asiatic Trading Trading Company, started 1st September 1750, and founded the pany of Bengalische Handelsgesellschaft on the 24th January 1753 1 Eribden, 1750 I he first of these Companies had a capital of £170,625; Embden but six ships sent successively to China only defrayed their Bengal own expenses, and yielded a profit of 10 per cent in seven is the Handels veais. The Bengal Company of Embden proved still more gesell unfortunate, its existence was summed up in two expeditions schaft, which did not pay, and a long and costly lawsuit 2

The failure of Frederick the Great's efforts to secure for Their Prussia a share in the India trade, resulted to some extent failure from the jealousy of the rival European Companies in India The Dutch, French, and English pilots refused to show the Dutch and way up the dangerous Húgli river to the Embden ships, 'or English any other not belonging to powers already established in of the India '3 It is due to the European Companies to state that in Embden Com thus refusing pilots to the new-comers, they were carrying out panies the orders of the Native Government of Bengal to which they were then strictly subject 'If the Germans come here,' the The Nawab had written to the English merchants on a rumour of Mawah's the first Embden expedition reaching India, 'it will be very against the bad for all the Europeans, but for you worst of all, and you Prussians will afterwards repent it, and I shall be obliged to stop all Therefore take care that these your trade and business German ships do not come '4 'God forbid that they should come,' was the pious response of the President of the English Council, 'but should this be the case, I am in hopes they will be either sunk, broke, or destroyed'

They came nevertheless, and some years later the English English Court of Directors complain that their Bengal servants are agents are necessaries to trade privately with the Embden Company 'If trade any of the Prussian ships,' wrote the Court, 'want the usual with Prussian company be supplied according to the customs of nations in amity one with the other. But you are on no pretence whatsoever to

<sup>1</sup> These dates are taken from Carlyle's Frederick the Great, vol iv pp 367, 368 (ed 1864) Carlyle's account of the Embden Companies is un fortunately of slight historical value

- The commercial details of these Companies are given by the Abbi Raynal, op cet ii pp 201, 202

3 Despatch from the Calcutta Council to the Court of Directors, dated 6th September 1754, para 11

Letter from the Nawab of Murshidabad Bengal Consultations of 19th August 1751

have any dealings with them, or give the least assistance in their mercantile affairs '1 The truth is that the German Company had effected an entrance into Bengal, and found the French, English, and Dutch merchants quite willing to trade with it on their private account. But the German investments were made without experience, and the Embden Company was before long sacrificed by the Prussian king to the evigencies of his European diplomacy.

Frederick sacrifices the Compuny

The list nation of Europe to engage in maritime trade with onpany. India was Sweden. When the Ostend Company was suspended, a number of its servants were thrown out of employment. Mr Henry Koning of Stockholm, took advantage of their knowledge of the Fast, and obtained a charter for the 'Swedish Company,' dated 13th June 1731. This Company was reorganized in 1806, but did little, and after many

troubles, disappeared from India

Cuses of fulure f the Portuguese

Such is a summary of the efforts by European nations to obtain a share in the India trade. The Portuguese failed, because they attempted a task altogether beyond their strength. the conquest and the conversion of India Their memorials are the epic of the I usiad, the death roll of the Inquisition, an indigent half caste population, and three decayed patches of territory on the Bombry coast. The Dutch failed on the Indian cont nent, because their trade was based on a monopoly which it was impossible to maintain, except by great and costly armaments Their monopoly, however, still flourishes in their isolated island dominion of Java. The I rench fuled. in spite of the brilliancy of their arms and the genius of their generals, from want of steady support at home. Their ablest Indian servants fell victims to a corrupt (ourt and a cateless people. Their surviving settlements disclose that talent for careful administration which, but for French monarchs and their ministers and their mistresses, might have been displayed throughout a wide Indian Empire

of the I rench

of the

Daten

Causes of failure of h. Ger mans The German Companies, whether Austrian or Prussian were sacrificed to the diplomatic necessities of their royal patrons in Europe, and to the dependence of the German states in the wars of the last century upon the Maritime Powers. But the German people has never abandoned the struggle. The share in the Indian tride which Prussian King.

<sup>&</sup>lt;sup>1</sup> Letter from the Court of Directors to the Calcutta Council, March 25, 1756 para 71

and Austrian Kaiser failed to grasp in the 18th century, has been gradually acquired by German merchants in our own day An important part of the commerce of Calcutta and Bombay Revival of is now conducted by German firms, German mercantile agents German are to be found in the rice districts, the jute districts, the India cotton districts, and persons of German nationality have rapidly increased in the Indian Census returns

England emerged the prize-winner from the long contest of Causes of the European nations for India Her success was partly the success in good gift of fortune, but chiefly the result of four elements in India the national character There was-first, a marvellous patience and self-restraint in refusing to enter on territorial conquests or projects of Indian aggrandizement, until she had gathered strength enough to succeed Second, an indomitable persistence in those projects once they were entered on and a total incapacity, on the part of her servants in India, of being stopped by defeat. Third, an admirable mutual confidence of the Company's servants in each other in times of trouble Fourth, and chief or all, the resolute support of the English nation at home Ingland has never doubted that she must retrieve, at whatever strain to herself, every disaster which may befull Englishmen in India, and she has never sacrificed the work of her Indian servants to the exigencies of her diplomacy in Europe She was the only European power Fixed which unconsciously but absolutely carried out these two policy of principles of policy. The result of that policy, pursued during in India. two and a half centuries, is the British India of to day

The extent to which the chief continental nations of Europe European now resort to British India, may be inferred from the following trades in 1872 and figures. These figures are exclusive of Europeans in French 1881 and Portuguese territory, and in the Native States Germans numbered 655 in 1872, and 1170 in 1881, French, 631 in 1872, and 1013 in 1881, Portuguese, 426 in 1872, and 147 in 1881, Italians 282 in 1872, and 788 in 1881, Greeks, 127 in 1872, and 195 in 1881, Swedes, 73 in 1872, and 357 m 1881, Russians, 45 m 1872, and 204 m 1881, Dutch, 70 in 1872, and 79 in 1881, Norwegians, 58 in 1872, and 358 in 1881, Danes, 45 in 1872, and 126 in 1881, Spaniards, 32 in 1872, and 87 in 1881, Belgians, 20 in 1872, and 180 in 1881, Swiss, 19 in 1872, and 87 in 1881, Turks, 18 in 1872, and 355 in 1881, Austrians, 53 in 1872, and 296 in 1881

## CHAPIER XV

## HISTORY OF BRITISH RULE (1757 TO 1885 A.D.)

Our first territorial possion Madras, 16,9

THE political history of the British in India begins in the 18th century with the French wars in the Karnatik Fort St George. the nucleus of Madras, founded by Francis Dav in 1639, was our earliest possession The French settlement of Pondicherri, about 100 miles lower down the Coromandel coast, was estab lished in 1674, and for many years the Figlish and French traded side by side without rivalry or territorial ambition English paid a rent of 1200 pagodas (£500) to the deputies of the Mughal Empire when Aurangzeb annexed the south, and on two occasions bought off a besieging army by a heavy bribe After the death of Aurangzeb in 1707, the whole of

Sor Tern 1707

It is af er Southern India became practically independent of Delhi the Deccan Proper, the Nizam-ul Mulk founded a hereditary dynasty, with Haidarabad for its capital, which exercised i nominal authority over the entire south. The Karnatik, or the lowland tract between the central plateau and the eastern sea was ruled by a deputy of the Nizám, known as the Nawab Farther south, Irichinopoli was the capital of a Hindu Raja, Tanjore formed another Hindu kingdom under a degenerate descendant of Swaji Inland, Mysore was gradually growing into a third Hindu State, while everywhere local chieftains, called palegais or nails, were in seini inde pendent possession of citadels or hill forts These represented the fief-holders of the ancient Hindu kingdom of Vijayanagar and many of them had maintained a practical independence since its fall in 1565

Loc-1 r les-

I rench tid Ing

Such was the condition of affairs in Southern India when war broke out between the English and the French in Furope Dupleix was at that time Governor of Pondicherri, and Clive was a young writer at Madras An English fleet first appeared on the Coromandel coast, but Dupleix, by a addictions present, induced the Nawab of Arcot to interpose and prevent hostilities In 1746, a French squadron arrived. under the command of La Bourdonnais Madras surrendered First almost without a blow, and the only settlement left to the French war, English was Fort St David, a few miles south of Pondicherri, 1746-48 where Clive and a few other fugitives sought shelter The we lose Nawab, faithful to his impartial policy, marched with 10,000 Madras, men to drive the French out of Madras, but was defeated In 1748, an English fleet arrived under Admiral Boscawen, and attempted the siege of Pondicherri, while a land force co-operated under Major Lawrence, whose name afterwards became associated with that of Clive The French repulsed all attacks, but the treaty of Aix-la Chapelle, in the same year, restored Madras to the English 1

The first war with the French was merely an incident in the Second greater contest in Europe The second war had its origin in French war, Indian politics, while England and France were at peace 1750-61 The easy success of the French arms had inspired Dupleix Dupleix with the ambition of founding a French empire in India, under the shadow of the Muhammadan powers Disputed successions at Haidarabád and at Arcot supplied his opportunity On both thrones Dupleix placed his nominees, and posed as the arbiter of the entire south. The English of Madras, under the instinct of self-preservation, had supported another candidate to the throne of Arcot in opposition to the nominee of Duplets Our candidate was Muhammad Ali, afterwards known in history as Wilá-jáh The war which ensued between the French and English in Southern India has been exhaustively described by Orme The one incident that Clive's stands out conspicuously is the capture and subsequent defence of Arcot, defence of Arcot by Clive in 1751 This heroic feat, even 1751 more than the battle of Plassey, spread the fame of English valour throughout India Shortly afterwards, Clive returned to England in ill health, but the war continued fittully for many years On the whole, English influence predominated in the Karnátik or Madras coast, and their candidate, Muhammad Alí, maintained his position at Arcot But, inland, the French were supreme in the Deccan, and they were able to seize the maritime tract called 'the Northern Circars'

The final struggle did not take place until 1760 In that Wande year Colonel (afterwards Sir Eyre) Coote won the decisive wash,

<sup>1</sup> The authorities for the French and English wars in Southern India are-(1) Orme's Indostan, 2 vols, Madras reprint, 1861, (2) Mill's Ilistory of British India (ed 1840), and (3) for the French views of those transactions, Colonel Malleson's admirable History of the French in India (I ondon, 1868), and Final Struggles of the French in India (London, 1878)

(11ng) sur 1 cndered 5th April 1761 victory of Wande vash over the French General, Lally, and proceeded to invest Pondicherri, which was starved into capitulation in January 1761. A few months later the hill-fortress of Ginjee (Gingi) also surrendered <sup>1</sup> In the words of Orme 'That day terminated the long hostilities between the two rival European powers in Coromandel, and left not a single ensign of the French nation avowed by the authority of its Government in any part of India'<sup>2</sup>

The
In\_lish
in Bengal,
1034-96

Meanwhile, the narrative of British conquest shifts with Clive to Bengal The first English settlement near the Gangetic estuary was Pippli in Orissa, at which the East India Company was permitted to trade in 1634, five years before the toundation of Madras The river on which Pippli stood has since silted up and the very site of the English settlement is now a matter of conjecture In 1640 a factory was opened at Húgh, in 1642 at Balasor, and in 1681, Bengal was erected into a separate presidency, though still subordinate to Madras The name of Calcutta is not heard of in the Company's records till 1686, when Job Charnock, the English chief, was forced to quit Hugh by the deputy of Aurangach, and settled lower down the river on the opposite bank There he acquired a grant of the three petty villages of Sutanati, Gobindpur, and Kaligh it (Calcutta) and founded the original Fort William in 1696

Vative 1 tlers of Pengal 1707 56 At the time of Aurangzeb's de th, in 1707, the Nawab or Governor of Bengal was Murshid Kuli Khán, known also in Furopean history as Jafar Khan. By birth a Bráhman, and brought up as a slave in Persia, he united the administrative ability of a Hindu with the fanaticism of a renegate. Hitherto the capital of Bengal had been at Dacca, on the eastern frontier of the empire, whence the piratical atticks of the Portuguese and of the Arakanese or Maghs could be most easily checked. Murshid Kuli Khan transferred his residence to Murshidábad, in the immediate neighbourhood of Kasimhazar, which was then the chief emporium of the Gangetic trade the Inglish, the French, and the Dutch had each factories at Kasimbazár, as well as at Dacca, Patna, and Maldah. But

I A full account of GINCI is given, sub-cibu, in The Insperial Gazetteer of India. In like manner, the local history of each Presidency, Province, of town is treated in the separate article upon it, and can therefore only be very briefly summarized here. Thus, with regard to Calcutta, the reader is referred to article CALCUTIA in The Imperial Gazetteer of India.

<sup>\*</sup> Orme's Ith tory of Military Transactions in Indostan (1803), Madras reprint, vol 11 p 733 (1861)

Calcutta was the head-quarters of the English, Chandarnagar European of the French, and Chinsurah of the Dutch These three settle-head ments were situated not far from one another upon reaches of 1740 the Húgli, where the river was navigable for sea going ships Calcutta is about 80 miles from the sea, Chandarnagar, 24 miles by river above Calcutta, and Chinsurah, 2 miles above Chandarnagar Húgh town, to which reference has so often been made, is almost conterminous with Chinsurah, but lies one mile above it

Murshid Kuli Khan ruled over Bengal prosperously for twenty one years, and left his power to a son in law and a grandson The hereditary succession was broken in 1740 by Ali Vardi Ali Vaidi Khan, a usurper, but the last of the great Nawabs of Bengal Khan, 1740-56 In his days the Marathá horsemen began to ravage the country, and the inhabitants of Calcutta obtained permission in 1742 to erect an earthwork, known to the present day as the Maratha ditch Ali Vardi Khan died in 1756, and was succeeded by his grandson, Siráj ud-Daulá (Surajah Dowlah), Siráj ud-Daulá (Surajah Dowlah Dowl 1 youth of only eighteen years, whose ungovernable temper Daula, led to a rupture with the English within two months after 1756 his accession

In pursuit of one of his own family who had escaped from his vengeance, he marched upon Calcutta with a large army Many of the Figlish fled down the river in their ships The remainder surrendered after a brave resistance, and were thrust for the night into the 'Black Hole' or military jail 'Black of Fort William, a room about 18 feet square, with only two Calcutta, small windows barred with iron It was our ordinary garrison 1756 prison in those times of cruel military discipline But although the Nawib does not seem to have been aware of the conse quences, it meant death to a crowd of 146 English men and women in the stifling heats of June When the door of the prison was opened next morning, only 23 persons out of 146 rem uned alive 1

The news of this disaster fortunately found Clive back again Clive and it Madras, where also was a squadron of the King's ships Watson under Admiral Watson Clive and Watson promptly sailed to

1 The contemporary record of that terrible night is Holwell's Narrative The original materials have been carefully examined, and much misie presentation has been cleared away by Dr II L bustced, in the Calcutta Englishman, several dates, 1880 The site of the 'Black Hole' has been lately identified, at the entrance to the lane behind the General Post Office, and the spot has been paved with fine stone (1884)

Calcutta 1757

the mouth of the Ganges with all the troops they could get Calcutta was recovered with little fighting, and the together recovered, Nawab consented to a peace which restored to the Company all their privileges, and gave them ample compensation for It is possible that matters might have ended thus, if a fresh cause of hostilities had not suddenly arisen War had just been declared between the English and French in Europe, and Clive, following the traditions of warfare in the Karnatik, captured the French settlement of Chandarnagar The Nawab Sirai ud-Daula, enraged by this breach of the peace within his dominions, took the side of the French acting upon the policy which he had learned from Dupleix, provided himself with a rival candidate (Mir Jafar) to the throne Undaunted, he marched out to the grove of Plassey, about 70 miles north of Calcutta, at the head of 1000 Europeans and 2000 sepoys, with 8 pieces of artillery The Bengal Viceroy's army numbered 35,000 foot and 15 000 horse, with 50 cannon

Battle of Plassey, 1757

How the victory w17 gained

Clive is said to have fought in spite of his Council of The truth is, he could scarcely avoid a battle Nawab attacked with his whole artillery, at 6 AM, but Clive kept his men well under shelter, 'lodged in a large grove, surrounded with good mud binks' At noon the enemy drew off into their entrenched camp for dinner. Clive only hoped to make a 'successful attack at night' Meanwhile, the enemy being probably undressed over their cooking pots, he sprang upon one of the r advanced posts, which had given him trouble, and stormed 'an angle of their camp' Several of the Nawab's chief officers fell. The Nawab himself, dismayed by the unexpected confusion, fled on a camel, his troops dis persed in a panic, and Clive found he had won a great victors Mir Jafar's cavalry, which had hovered undecided during the battle, and had been repeatedly fired on by Clive, 'to make them keep their distance,' now joined our camp, and the road to Murshidabád lay open 1

The battle of Plassey was fought on June 23, 1757, an anniversary afterwards remembered when the Mutiny of 1857 was at its height. History has agreed to adopt this dite as the beginning of the British Empire in the I ast. But the immediate results of the victory were comparitively small, and several years passed in hard fighting before even the Bengalis would admit the superiority of the British arms

Its small results at tirst

<sup>1</sup> These numbers and the account of the battle are taken by the author from Clive's Ms Despatch to the Secret Committee, dated 26th July 1757 I - quotations are Clive's own words

moment, however, all opposition was at an end Clive, again following in the steps of Dupleix, placed Mir Jafar upon the Mir Jafar, Viceregal throne at Murshidábád, being careful to obtain a 1757 patent of investiture from the Mughal court

Enormous sums were exacted from Mir Jafar as the price of Pecuniary The Company claimed 10 million rupees as com-compensa pensation for its losses For the English, native, and Armenian English inhabitants of Calcutta were demanded, respectively, 5 million, 2 million, and 1 million rupees, for the naval squadron and the army, 21 million rupees apiece The members of the Council received the following amounts -Mr Drake, the Governor, and Colonel Clive, as second member of the Select Committee, 280,000 rupees each Colonel Clive also received 200,000 rupees as Commander-in Chief, and 1,600,000 rupees 'as a private donation,' Mr Becker, Mr Watts, and Major Kilpatrick, 240,000 rupees each, besides 'private donations,' amounting in the case of Mr Watts to 800,000 rupees gratifications of a personal character, including the donation to the troops and the fleet, aggregated £1,238,575, 1 while the whole clum amounted to  $f_{2,697,750}$ The English stil cherished extravagant ideas of Indian wealth. But no funds existed to satisfy their inordinate demands, and they had to be contented with one half the stipulated sums. Even of this reduced amount, one third had to be taken in jewels and plate, there being neither coin nor bullion left

At the same time, the Nawab made a grant to the Com Grant of pany of the *camindari* or landholder's rights over an extensive I wenty tract of country round Calcutta, now known as the District gants, square miles In 1757 the Company obtained only the zamındarı rights-ic, the rights to collect the cultivators' rents, with the revenue jurisdiction over them. The superior lordship, or right to receive the land tax, remained with the But in 1750 this also was granted by the Delhi I mperor, the nominal Suzerum of the Nawab, in favour of Clive, who thus became the landlord of his own masters, the Company Clive was enrolled among the highest nobility of the Mughal Empire, with the rank of commander of 6000 foot and 5000 horse, and a large allotment of land near Calcutta, in 1759

This military fief, or Clive's ságir, as it was called, subse-Clive's Lord Clive's Jagir, quently became a matter of inquiry in England

1 For a full statement of the personal donations, see Mill's History of British India, vol in pp 367, 368 (Wilson's ed 1840)

claims to the property as feudal Suzerain over the Company were contested in 1764. On the 23rd June 1765, when he returned to Bengal, a new deed was issued, confirming the unconditional págir to Lord Clive for ten years, with reversion afterwards to the Company in perpetuity. This deed, having received the Emperor's sanction on the 12th August 1765, gave absolute validity to the original págir grant in favour of Lord Clive. It transferred, in reversion, to the Company the I wenty-four Parganás as a perpetual property based upon a págir grant. The sum of Rs. 222,958, the amount at which the land was assessed when first made over to the Company in 1757, was paid to Lord Clive from 1765 until his death in 1774, when the whole proprietary right reverted to the Company.

Clive that In 1758, Clive was appointed by the Court of Directors the Governor of Bengal, first Governor of all the Company's settlements in Bengal 2 1755,

<sup>1</sup> For a full account of the different grants and the powers granted by them see Hunter's Statistical Account of B noal, vol 1 (TWENTY FOUR PARCANAS), pp. 19, 20

<sup>2</sup> GOVERNORS AND GOVERNORS GENERAL OF INDIA UNDER THE EAST INDIA COMBAN, 1758-1858

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1758 I ord Clive, Governor
                                   1805 Sir George Birlow (fro lim)
1760 Mr Z Holwell (frotem)
                                   1807 Earl of Minto
1760 VII Vans ttart
                                   1813 Earl of Mona, Marquis of
1765 Lord Clive (second time)
                                           Hasting-
1767 Harry Verel-t
                                   1823 John Adam (pio tem )
1769 John Cartier
                                   1823 I old Amberst
1772 Warren Hastings (first Gover
                                   1828 M: Butterworth Bayley (pro
        nor General, 1774)
                                           Ion 1
1785 Sir John Macpherson (* o
                                   1828 Lord William Cavendish
        tem )
                                           Bentinck
1786 Marquis of Cornwallis
                                   1835 Sir Chas Metcalfi, afterwards
1793 Sir John Shoie (Lord Leign
                                           Lord Metcalfe (pro tem )
                                   18.6 Farl of Auckland
        mouth)
1798 Sir Alured Clarl e (pro tem )
                                   1842 Ful of Flienborough
1798 Lord Mornington (Maiquis
                                   1844 Viscount Hardinge
                                   1848 Larl (afterwards Marquis) of
        Wellesley)
1805 Marquis of Cornwallis/second
                                           Dalhousie
        time)
                                  1856 Farl Cunning
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## VICEROUS OF INDIA UNDER THE CROWN, 1858-85

			, , ,
1858	Farl Canning	1869	I arl of Mayo
1862	Larl of Elgin	1872	Sir John Strachey (protem)
1863	Sir R Napier, afterwards Lord	1872	Lord Napier of Merchistoun
	Napier of Magdala (protem)		(pro tem)
	Sir William Denison (p10	1872	Earl of Northbrook
	tem)	1876	Earl of Lytton
1864	tent) Sir John Lawrence (Lord	1880	Marquis of Ripon
			Lord Dufferin

Two powers threatened hostilities On the west, the Shahzada or Imperial prince, known afterwards as the Emperor Shah Alam, with a mixed army of Afgháns and Maráthas, and supported by the Nawab Wazir of Oudh, was advancing his own claims to the Province of Bengal In the south, the influence of the French under Lally and Bussy was over shadowing the British at Madras

The vigour of Clive exercised a decisive effect in both directions Mir Jafar was anxious to buy off the Shahzada, who had already invested Patná But Clive marched in person to the scatters rescue, with an army of only 450 Europeans and 2500 sepoys, Oudh army, and the Mughal army dispersed without striking a blow Clive also despatched a force southwards from Bengal under Colonel overcomes French in 1759, which recaptured Masulipatam from the French, French in Madras, and permanently established British influence throughout the Northern Circars, and at the court of Haidarábad attacked the Dutch, the only other European nation who might yet prove a rival to the English. He defeated them defeats both by land and water, and their settlement at Chinsurah Dutch existed thenceforth only on sufferance

I 10m 1760 to 1765, Clive was in England He had left Misman no system of government in Bengal, but merely the tradition agement, that unlimited sums of money might be extracted from the natives by the terror of the English name In 1761, it was found expedient and profitable to dethrone Mir Jafar, the English Nawab of Murshidabad, and to substitute his son in law, Mir Kasim, in his place. On this occasion, besides Mir Ka im private donations, the English received a grant of the three set up, Districts of Bardwan, Midnapur, and Chittagong, estimated to yield a net revenue of half a million sterling. But Mír Kasım soon began to show a will of his own, and to cherish dreams of independence He retired from Murshidabad to Monghyr a strong position on the Ganges, commanding the only means of communication with the north-west. There he proceeded to organize an army, drilled and equipped after European models, and to carry on intrigues with the Nawab Wazir of Outh He resolved to try his strength with the English, and found a good pretext

The Company's servants claimed the privilege of carrying on their private trade throughout Bengal, free from inland dues and all imposts The assertion of this claim caused Mir Kasim affrays between the customs officers of the Nawab and the breaks with the native traders, who, whether truly or not, represented that English

they were acting on behalf of the servants of the Company The Nawab alleged that his civil authority was everywhere set at nought. The majority of the Council at Calcutta would not listen to his complaints. The Governor, Mr. Vansittart, and Warren Hastings, then a junior member of Council, attempted to effect some compromise. But the controversy had become too hot. The Nawab's officers fired upon an English boat, and forthwith all Bengal rose in arms. I wo thousand of our sepois were cut to pieces at Patná, about 200 Englishmen, who there and in various other paits of the Province fell into the hands of the Muhammadans, were massacred.

Patna Massacie, 1763

> But as soon as regular warfare commenced, Mir Kasım met with no more successes. His trained regiments were defeated in two pitched battles by Major Adams, at Gheriah and at Udhanála (Oodeynullah) and he himself took refuge with the Nawab Wazir of Oudh, who refused to deliver him up. This led to a prolongation of the war. Shah Alam, who had succeeded his father as Delhi Imperor, and Shuja ud-Daula the Nawab Wazir of Oudh united their forces, and threatened Patná, which the English had recovered. A more formidable danger appeared in the English camp, in the form of the first This was quelled by Major (afterwards Sir Hector) Munro, who ordered 24 of the ringleaders to be blown from guns—an old Mughal punishment In 1764, Major Munro won the decisive battle of Baxar, which laid Oudh at the feet of the conquerors, and brought the Mughal Emperor a suppliant to the English camp

Fir-t sepoy mu inv 1764

battle of baxar, 1764

Clive's second governor ship,

Meanwhile, the Council at Calcutta and twice found the opportunity they loved of selling the government of Bengal to a new Nawab. But in 1765, Clive (now Baron Clive of Plassey in the peerage of Ireland) arrived at Calcutta, as Governor of Bengal for the second time. I wo landmarks stand out in his policy. First, he sought the substance, although not the name, of territorial power under the fiction of a grant from the Mughal Emperor. Second, he desired to purify the Company's service, by prohibiting illicit gains, and by guaranteeing a reasonable pay from honest sources. In neither respect were his plans carried out by his immediate successors. But the beginning of our Indian rule dates from

<sup>&</sup>lt;sup>1</sup> The massacre of Patna is described in sufficient detail under article Parna District in The Imperial Gaulteer of India, and in Hunter's Statistical Account of Bengal, vol at pp. 71 et seq.

this second governorship of Clive, as our military supremacy had dated from his victory at Plassey

Clive landed, advanced rapidly up from Calcutta to Allah-Clive's abad, and there settled in person the fate of nearly half of Gangetic India. Oudh was given back to the Nawab Wazir, on condi-valley, tion of his paying half a million sterling towards the expenses 1765 of the war The Provinces of Allahabad and Kora, forming the greater part of the Doab, were handed over to Shah Alam, the Delhi Emperor, who in his turn granted to the Company the divant or fiscal administration of Bengal, Behar, and Diwani Orissa, with the jurisdiction of the Northern Circars puppet Nawab was still maintained at Murshidibad, with an 1765 annual allowance from us of £600,000 Half that amount, or about £300,000, we paid to the Emperor as tribute from Bengal<sup>2</sup> Thus was constituted the dual system of Government, by which the English received the revenues of Bengal and undertook to maintain the army, while the criminal jurisdiction, or msámat, was vested in the Nawáb phraseology, the Company was diwan, and the Nawab was n'sam The actual collection of the revenues still remained for some years in the hands of native officials

Clive's other great task was the reorganization of the Com Clive's pany's service. All the officers, civil and military alike, were reorgan ization trained with the common corruption. Their legal salaries were of the paltry and quite insufficient for a livelihood. But they had Company's been permitted to augment them, sometimes a hundred-fold, 1766 by means of private trade and gifts from the native powers. Despite the united resistance of the civil servints, and an actual mutiny of two hundred military officers, Clive carried through his reforms. Private trade and the receipt of presents were prohibited for the future, while a substantial increase of pay was provided out of the monopoly of salt.

Lord Clive quitted India for the third and last time in 1767 Dual sys Between that date and the governorship of Warren Hastings tem of admin in 1772, little of importance occurred in Bengal beyond the stration terrible famine of 1770, which is officially reported to have 1767-72, swept away one-third of the inhabitants. The dual system of government, established in 1765 by Clive, had proved a

<sup>&</sup>lt;sup>1</sup> The 'Cornh' of the E I Company's records, the capital of an ancient Muhammadan governorship, now a decayed town in Fatehpur District Sec article Kora in *The Imperial Gazet' i of India* 

<sup>-</sup> The exact sums were Sikka Rs 5,386,131 to the Nawab, and Sikka Rs 2,600,000 to the Emperor

Dunl system abolished. 1772

failure Warren Hastings, a tried servant of the Company, distinguished alike for intelligence, for probity, and for knowledge of oriental manners, was nominated Governor by the Court of Directors, with express instructions to carry out a predetermined series of reforms In then own words, the Court had resolved to 'stand forth as divan, and to take upon themselves, by the agency of their own servants, the entire care and administration of the revenues' In the execution of this plan. Hastings removed the exchequer to Calcutta from Murshidabad, which had up to that time remained the revenue head-quarters of Bengal He also appointed European officers, under the now familiar title of Collectors, to superintend the revenue collections and preside in the courts

Warren Hastin\_s 17-2-85

His admi

DISTABLISE reform-

Hastings policy with native DOWEIS

Warren Hastingfirst Covernor General, 1774

Clive had laid the territorial foundations of the British Empire in Bengal Hastings may be said to have created i British administration for that Empire The wars forced on him by Native Powers in India, the clamours of his masters in England for money, and the virulence of Sir Philip I rancis with a faction of his colleagues at the Council table in Calcutta, retarded the completion of his schemes. But the manuscript records disclose the patient statesmanship and indomitable industry which he brought to bear upon them 1765 to 1772 Clives dual system of government, by corrupt native underlings and rapacious English chiefs, prevuled years were now spent by Warren Hastings in experimental efforts at rural administration by means of English officials (1772-85) The completion of the edifice was left to his suc But Hastings was the administrative organizer, as Clive had been the territorial founder, of our Indian Impire

Hastings' true fame as an Indian ruler rests on his admini strative work He reorganized the Indian service, reformed every branch of the revenue collections, created courts of justice and some semblance of a police. History remembers his name, however not for his improvements in the internal administration, but for his bold foreign policy, and for the crimes into which it led him From 1772 to 1774, he was Governor of Bengal, from the latter date to 1785, he was the first Governor General, presiding over a Council nomi nated, like himself, under a statute of Parliament known as the Regulating Act (1773) In his domestic policy he was greatly hampered by the opposition of his colleague in council. Sir Philip Francis But in his external relations with Oudh, with the Maráthás, and with Hudar Ali, he was generally able to compel assent to his views

His relations with the native powers, like his domestic His two policy, formed a well-considered scheme Hastings had to fold aims find money for the Court of Directors in England, whose thirst for the wealth of India was not less keen, although more decorous, than that of their servants in Bengal also to protect the Company's territory from the Native Powers, which, if he had not destroyed them, would have annihilated him. An honest man under such circumstances might be led into questionable measures Hastings in his personal dealings, and as regards his personal gains, seems to have been a high minded English gentleman But as an Anglo-Indian statesman, he shared the laxity which he saw practised by the native potentates with whom he had to deal Parts of his policy were vehemently assailed in Parliament, and cannot be upheld by right thinking men It is the object of the present summary neither to attack nor to defend his measures, but to give a short account of them as a connected whole

Warren Hastings had in the first place to make Bengal pay Hastings This he could not do under Clive's dual system of administra Bengal tion When he abolished that double system, he cut down pay the Nawab's allowance to one half, and so saved about £,160,000 1 year In defence of this act, it may be stated that the titular N iwab, being then a minor, had ceased to render even any nominal service for his enormous pension. Clive had himself reduced the original £,600,000 to £,450,000 on the accession of a new Nawab in 1766, and the grant was again cut down to  $\pm 350,000$  on a fresh succession in 1760 1 The allowance had practically been of a fluctuating and personal character 2 Its further reduction in the case of the new child-Nawab had, moreover, been expressly ordered by the Court of Directors six months before Hastings took office

Hastings next financial stoke was the sale of Allahabad and Sells These Provinces had Allahalad and Kora, Kora Provinces to the Wazir of Oudh been assigned by Clive, in his partition of the Gangetic valley, 1773 to the Emperor Shah Alam, together with a tribute of about £,300,000 (26 laklis of rupees), in return for the grant of Bengal to the Company But the Emperor and now been

<sup>&</sup>lt;sup>1</sup> The detailed history of these transactions, and a sketch of each of the 14 Nawabs of Bengal from 1704 to 1884, will be found under District Mur shidabid, vol ix pp 172-195 of Hunter's Statistical Account of Bengal

<sup>-</sup> See separate agreements with the successive Nawabs of 30th September 1765, 19th May 1766, and 21st March 1770, in each of which the grant is to the \in ib, without mention of heirs or successors - litchison's Irealies and Engagem n's, vol 1 pp 56-59 (ed 1876)

seized by the Marathas Hastings held that His Majusty was no longer independent, and that it would be a fatal policy for the British to pay money to the Maráthas in Northern India, when it was evident that they would soon have to fight He therefore withheld the tribute of the Withholds them in the south tne Lmperor's £300,000 from the puppet Emperor, or rather from his Marátha custodians

tribute

Clive, at the partition of the Gangetic valley in 1765, assigned the Provinces of Allahabid and Kora to the Emperor Finperor, now in the hands of the Marathás, had made them over to his new masters. Warren Hastings held that by so doing His Majesty had forfeited his title to these Provinces Hastings accordingly resold them to the Wazir of Oudh this measure he freed the Company from a military charge of nearly half a million sterling (40 likhs of rupecs), and obtained a price of over half a million (50 lanks) for the Company

The Ro hilla war, 1773-74

The sale included the loan of the British troops to subduc the Rohilla Afghans, who held a large tract in those Provinces ever since Ahmad Shah's desolating invasion in 1761 Rohillas were foreigners, and had cruelly lorded it over the peasantry 1 They now resisted bravely, and were crushed with the merciless severity of Asiatic warfare by the Wazir of Oedh, aided by his British troops By these measures Warren Hastings bettered the finances of Bengal to the extent of a million sterling a year on both sides of the account, but he did so at the cost of treaties and pensions granted by his predecessor Clive

Llunder of Chart Singh, 1780

He further improved the financial position of the Company by what is known as the plunder of Chait Singh and the Begam of Oudh Chait Singh, the Raja of Benares, had grown rich under British protection He resisted the demand of Warren Hastings to subsidize a military force, and an alleged correspondence with the enemies of the British Government led to his arrest He escaped, headed a rebellion, and was crushed His estates were forfeited, but transferred to his nephew sub ject to an increased tribute 2

Hastings fines the Oudh Pegam, 1782

The Begam, or Queen Mother, of Oudh was charged with abetting the Benares Raja in his rebellion. A heavy fine was laid upon her, which she resisted to the utmost. But after

<sup>&</sup>lt;sup>1</sup> For the history of the Rohilla Afghans, on whom much sentiment has been needlessly lavished, see article DARFILLY DISTRICT, The Imperial Gar tieer of India, and other Districts of Kohilkhand

See The Imperial Gazether of India, articles by NARIS DISTRICT and BENARES LSIAIE

cruel pressure on herself and the eunuchs of her household, over a million sterling was extorted for the English Company

On his return to England, Warren Hastings was impeached, Charges in 1786, by the House of Commons for these and other alleged again t acts of oppression He was solemnly tried by the House of Hasting, Lords, and the proceedings dragged themselves out for seven vears (1788-05) They form one of the most celebrated State trials in English history, and ended in a verdict of not guilty on all the charges Meanwhile, the cost of the defence had ruined Warren Hastings, and left him dependent upon the charity of the Court of Directors—a charity which never failed

The real excuse, such as it is, for some of Hastings' measures Hastings is that he had to struggle for his very existence, that native poor perfidy gave him his opportunity, and that he used his opportunity, on the whole, less mercilessly than a native Viceroy would have done It is a poor excuse for the clearest English head, and the firmest administrative hand, that ever ruled In his dealings with Southern India, Warren Hastings had not to regard solely the financial results. He there appears as the great man that he really was, calm in council, cautious of enterprise, but swift in execution, and of indomitable courage in all that he undertook

The Bombay Government was naturally emulous to follow the example of Madras and Bengal, and to establish its supremacy at the Court of Poona by placing its own nominee upon the throne I his ambition found its scope in 1775 by the treaty of Surat, by which Raghunáth Rao, one of the claimants to the throne of the Peshwa, agreed to cede Salsette and Bassein to the English, in consideration of being himself restored to Poona. The military operations that followed are First Mar known as the first Maratha war Warren Hastings, who in his atha war, capacity of Governor-General claimed some degree of control over the decisions of the Bombay Government, strongly dis approved of the treaty of Surat But when war actually broke out, he threw the whole force of the Bengal army into the scale One of his favourite officers, General Goddard, marched across Goddard's the peninsula from sea to sea, and conquered the rich Province march, of Gujarat almost without a blow Another, Captain Popham, snatched by storm the rock fortress of Gwalior, which was regarded as the key of Hindustan

These brilliant successes of the Bengal troops atoned for the contemporaneous disgrace of the convention of Wargaum in 1779, when the Maráthas overpowered and dictated terms to our Bombay force The war in Bombay lasted till 1781

Treaty of Salbai, 1782

It was closed by the treaty of Salbai (1782), which practically restored the status quo Raghunath Ráo, the English claimant to the Peshwaship, was set aside on a pension, Gujarit was restored to the Marathas, and only Salsette, with Llephanta and two other small islands, was retained by the English

War with Wisore, 1780-84

Meanwhile, Warren Hastings had to deal with a more formidable enemy than the Marathá confederacy The reckless conduct of the Madras Government had roused the hostility both of Haidar Alí of Mysore and of the Nizam of the Deccan. the two strongest Musalman powers in India These princes began to draw the Marathas into an alliance against the English The diplomacy of Hastings won back the Nizam and the Marathá Raja of Nagpur, but the army of Haidar Alı fell like a thunderbolt upon the British possessions in the Karnatik A strong detachment under Colonel Bullie was cut to pieces at Pollilore, and the Mysore cavalry ravaged the country up to the walls of Madras For the second time the Bengal army, stimulated by the energy of Hastings, saved the honour of the English name He despatched Sir Eyre Coote, the victor of Wandewash, to relieve Madras by sea, with all the men and money available, while Colonel Pearse marched south overland to overawe the Raja of Berar and the Nizum The war was hotly contested, for the aged Sir Evre Coote had lost his energy, and the Mysore army was not only well disciplined and equipped, but skilfully handled by Haidar and Haidar died in 1782, and peace was finilly his son lipu concluded with Tipu in 1784, on the basis of a mutual restitution of all conquests

Death of Jaidar Vii, 1782

י זין סוח חלויה, קאט−93 Two years later, Warren Hastings was succeeded by I ord Cornwallis, the first English nobleman of rank who undertook the office of Governor-General of India. Between these two great names an interval of twenty months took place under 5ir John Macpherson, a civil servant of the Company (I cb 1785 to Sept 1876). Lord Cornwallis twice held the high post of Governor-General. His first rule lasted from 1786 to 1793, and is celebrated for two events—the introduction of the Permanent Settlement into Bengal, and the second Mysore war. If the foundations of the system of civil administration were laid by Hastings, the superstructure was raised by Cornwallis. It was he who first entrusted criminal jurisdiction to Europeans, and established the Nizamat Sadr Adalat, or Supreme Court of Criminal Judicature, at Calcutta

It was he, also, who separated the functions of the District Collector and Judge

The system thus organized in Bengal was afterwards ex His tended to Madras and Bombay, when those Presidencies also revenue acquired territorial sovereignty. But the achievement most familiarly associated with the name of Cornwallis is the Permanent Settlement of the land revenue of Bengal During four years, 1786-90, he laboured, with the help of an able Bengal civilian, John Shore, to arrive at the facts of the case Warren Hastings had introduced, unsuccessfully and only for a period, a five years' settlement of the land revenue Lord Cornwallis, after three years of inquiry and of provisional measures, introduced a ten years' or 'decennial' settlement The De (1789-91) Up to this time, the revenue had been collected central Scitle pretty much according to the old Mughal system zamındars, or Government farmers, whose office always tended 1789-91 to become hereditary, were recognised as having a right to collect the revenue from the actual cultivators principle of assessment existed, and the amount actually realized varied greatly from year to year. Hastings seems to have looked to experience, as acquired from a succession of quinquennial settlements, to furnish the standard rate of the Francis, on the other hand, Hastings' great rival, advocated the fixing of the State demand in perpetuity same view recommended itself to the authorities at home, Period of partly because it would place their finances on a more stable expension basis, partly because it seemed to identify the samindar with the landlord of the Linglish system of property. Accordingly, Cornwallis took out with him in 1786 instructions to introduce 1 Permanent Settlement

The process of assessment began in 1789, and terminated in The Per No attempt was made to measure the fields or calculate manent Settlement the out turn, as had been done by Akbar, and as is now done of Bengal, whenever settlements are made in the British Provinces amount to be paid in the future was fixed by reference to what had been paid in the past. At first the settlement was called decennial, but in 1793 it was declared permanent for ever The total assessment amounted to Sikka Rs 26,800,989, or about 3 millions sterling for Bengal Lord Cornwallis carried the scheme into execution, but the pruse or blame, so far as details are concerned, belongs to Sir John Shore, afterwards Lord Teignmouth, a civil servant, whose knowledge of the country was unsurpassed in his time Shore would have proceeded more cautiously than Cornwillis' preconceived English

idea of a proprietary body, and the Court of Directors' haste after fixity, permitted 1

Second Mysore war, 1790 92

The second Mysore war of 1790-92 is noteworthy on two Lord Cornwallis, the Governor-General, led the British army in person, with a pomp and a magnificence of supply which recalled the campaigns of Aurangzeb two great southern powers, the Nizam of the Deccan and the Maratha confederacy, cooperated as allies of the In the end, I pu Sultin submitted when Lord Cornwallis had commenced to beleaguer his capital agreed to yield one half of his dominions to be divided among the alies, and to pay 3 millions sterling towards the cost of the war I hese conditions he fulfilled, but over afterwards he burned to be revenged upon his English conquerors

5n John Shore 1795-95

The period of Sir John Shore's rule as Governor General, from 1793 to 1798, was uneventful In 1798, Lord Mornington, better known as the Marquis of Wellesley, arrived in India, already inspired with imperial projects which were destined to change the map of the country. Mornington was the friend and favourite of Pitt, from whom he is thought to have derived his far-reaching political vision, and his Marquis of antipathy to the French name From the first he laid down Wellesley, as his guiding principle, that the English must be the one paramount power in the peninsula, and that native princes could only retain the insignia of sovereignty by surrendering their political independence. The history of India since his time has been but the gridual development of this policy, which received its finishing touch when Queen Victoria was proclaimed Empress of India on the 1st of January 1877 4

Liench influence in India. 1798-1800

Io frustrate the possibility of a French invasion of India, led by Napoleon in person was the governing idea of

1 The Permanent Settlement will be referred to in greater detail, and 114 practical working exhibited, under the Administrative chapter

An admirable account of Lord Wellesley's policy will be found in the Despatch of the Governor General in Council to the Secret Committee of the Court of Directors, dated Fort William, 12th April 1804 Despatch extends to 791 paragraphs, and covers all the great Indian ques tions of that eventful period. It was printed by John Stockdale, Pieca dilly, in 1805, as a quarto volume, entitled, Ilistory of all the Livents and Transactions whi h have taken place in India, etc. It will continue to form the most authentic record of any Covernor Generalship of India, until the scal is taken off Lord Dalhousic's long closed divines

Wellesley's foreign policy France at this time, and for many years later, filled the place afterwards occupied by Russia in the imagination of English statesmen Nor was the danger so remote as might now be thought French regiments guarded and overawed the Nizam of Haidarabad The soldiers of Sindhia, the military head of the Maratha confederacy, were disciplined and led by French adventurers Tipú Sultan of Mysore carried on a secret correspondence with the French Directorate, allowed a tree of liberty to be rlanted in his dominions, and enrolled himself in a republican club as 'Citizen Tipu' The islands of Mauritius and Bourbon afforded a convenient half way rendezvous for French intrigue and for the assembling of a hostile expedition Above all, Napoleon Buonaparte was then in Egypt, dreaming of the conquests of Alexander, and no man knew in what direction he night turn his hitherto unconquered legions

Wellesley conceived the scheme of crushing for ever the India be French hopes in Asia, by placing himself at the head of a fore Lord Wellesley, great Indian confederacy In Lower Bengal, the conquests 1798. of Clive and the policy of Warren Hastings had made the Before Lord Wellesley's arrival, our knglish paramount power was consolidated from the seaboard to Benares, high in the up the Gangetic valley Beyond our frontier there, the Nawab north, Wazir of Oudh had agreed to pay a subsidy for the aid of British troops I his sum in 1797 amounted to £760,000 a year, and the Nawab, being always in arrears, entered into negotiations for a cession of territory in lieu of a cash pay-In 1801, the treaty of Lucknow made over to the British the doal, or fertile tract between the Ganges and the Jumna, together with Rohilkhand In Southern India, our possessions in the were chiefly confined in 1798, before Lord Wellesley, to the south coast Districts of Madras and Bombay

Wellesley resolved to make the British supreme as far as Delhi Lord Wel in Northern India, and to compel the great powers of the south lesley's to enter into subordinate relations to the Company's government The intrigues of the native princes gave him his opportunity for carrying out his plan without breach of faith had arrived when the Fnglish must either become supreme in India, or be driven out of it The Mughal Empire was completely broken up, and the sway had to pass either to the local Muhammadan governors of that Empire, or to the Hindu confederacy represented by the Maráthas, or to the British Lord Wellesley determined that it should pass to the British

Lord Wel lesley's work,

in the north.

His work in Northern India was at first easy. By the treaty of Lucknow in 1801, he made us territorial rulers as far as the heart of the present North Western Provinces, and established our political influence in Oudh. Beyond those limits, the northern branches of the Marathas practically held sway, with the puppet Emperor in their hands. Lord Wellesley left them untouched for a few years, until the second Maratha war (1802-04) gave him an opportunity for dealing effectively with their nation as a whole

in the

In Southern India, I ord Wellesley quickly perceived that the Muhammadan Nizam at Haidarabad stood in need of his protection, and he converted him into a useful follower throughout the succeeding struggle. The other Muhammadan power of the south Tipu Sultan of Mysore, could not be so easily handled. Lord Wellesley resolved to crush him, and had ample provocation for so doing. The third power of Southern India—namely, the Hindu Maiatha confederacy—was so loosely organized that Lord Wellesley seems at first to have hoped to live on terms with it. When several vears of fitful alliance had convinced him that he had to choose between the supremacy of the Muathas or of the Britis i in Southern India, he did not hesitate in his decision.

Treaty
with the
Nizari,
1798

Lord Wellesley first addressed himself to the weakest of the three southern powers, the Nizam at Haidarabad. Here he won a diplomatic success, which tuined a possible rival into a subservient ally. The French battalions at Haidarabad were disbanded, and the Nizam bound himself by treaty 1 not to take any European into his service without the consent of the English Government,—a clause since inserted in every leading engagement entered into with Native Powers.

Ilm I Mysore war 1799 Wellesley next turned the whole weight of his resources against I ipu, whom Cornwallis had defeated, but had not subdued. I ipu's intrigues with the French were laid bare, and he was given an opportunity of adhering to the new subsidiary system. On his refusal, war was declared, and Wellesley came down in viceregal state to Madras to organize the expedition in person, and to watch over the course of events. One I nglish army marched into Mysore from Madras, accompanied by a contingent from the Nizam. Another advanced from the western coast. Tipu, after a feeble resistance in the field, retired into Seringapatam, and, when his capital was stormed, died fighting bravely in the breach, 1799. Since the battle of Plassey

Dated 1st September 1798 —Aitchison's Lieutus and Lu asements, vol v pp 173 176 (cl 1876)

no event had so greatly impressed the native imagination as Fall of the capture of Seringapatam, which won for General Harris a Seringapatam, 1799 peerage, and for Wellesley an Irish Marquisate

In dealing with the territories of \(\Gamma\) in Welleslev acted with The central portion, forming the old State of Mysore, was restored to an infant representative of the Hindu Rajás, whom Haidar Alí had dethroned, the rest of Tipú's dominions was partitioned between the Nizam the Maráthas. and the English At about the same time, the Karnátik, or the part of South-eastern India ruled by the Nawab of Arcot. and also the principality of Tanjore, were placed under direct British administration, thus constituting the Madras Presidency almost as it has existed to the present day. The sons of the slain Tipu were treated by Lord Wellesley with paternal tender-They received a magnificent allowance, with semi royal establishment, first at Vellore, and afterwards in Calcutta The last of them, Prince Ghulam Muhammad, was long well known as a public spirited citizen of Calcutta, and an active Justice of the Peace He died only a few years ago (about 1877)

The Marathas had been the nominal allies of the English The Wat in both their was with I ipu But they had not rendered athrs in active assistance, nor were they secured to the English side as the Nizum now was. The Maratha powers at this time were five in number The recognised head of the con federacy was the Peshwa of Poona, who ruled the hill country of the Western Ghats, the cradle of the Marátha race fertile Province of Guiarat was annually harried by the horsemen of the Gaekwar of Baroda In Central India, two militars leaders, Sindhia of Gwalior and Holkar of Indore, alternately held the pre eminency Towards the east, the Bhonsla Raja of Nagnur reigned from Bei ir to the coast of Orissa

Wellesley laboured to bring these several Maratha powers Welles within the net of his subsidiary system In 1802, the necessities less deal of the Peshwa, who had been defeated by Holkar, and driven the Mar as a fugitive into British territory, induced him to sign the athas By this he pledged himself to the British treaty of Bassein to hold communications with no Power, European or Native, He also granted to us Districts for the except ourselves maintenance of a subsidiary force This greatly extended the English territorial influence in the Bombay Presidency it led to the second Marathá war, as neither Sindhia nor the Rain of Nágpur would tolerate the Peshwa's betrayal of Marith i independence

Second Maratha war, 1802-04

The campaigns which followed are perhaps the most glorious in the history of the British arms in India general plan, and the adequate provision of resources, were due to the Marquis of Wellesley, as also the indomitable spirit which refused to acknowledge defeat. The armics were led by Sir Arthur Wellesley (afterwards Duke of Wellington), and (reneral (afterwards Lord) Lake Wellesley operated in the Deccan, where, in a few short months, he won the decisive victories of Assaye and Argrum, and captured Ahmrdnigar Lake's campaign in Hindustan was no less brilliant, although it has received less notice from historians He won pitched battles at Aligarh and I aswari, and took the cities of Delhi and Agra He scattered the French troops of Sindhia, and at the same time stood forward as the champion of the Mughal Emperor in his hereditary capital Before the end of 1803, both Sindhia and the Bhonsla Raja of Nagpur sued for peace

British Victories, 1802-03

Additions to British India, 1803

Sindhia ceded all claims to the territory north of the Jumna. and left the blind old I mperor Shah Alam once more under The Bhonsla forfeited Oussa to the British protection English, who had already occupied it with a flying column in 1803, and Berar to the Nizam who gained a fresh addition by every act of complaisance to the British Government The freebooter Inswant Rao Holkar alone remained in the field supporting his troops by raids through Milwa and Raiputana The concluding years of Wellesley's rule were occupied with a series of operations igainst Holkar, which brought little credit on the British name. The disastrous retreat of Colonel Monson through (entral India (1804) recalled memories of the convention of Wargium, and of the destruction of Colonel Baillies force by Haidar Mi repulse of Lake in person at the siege of Bhartpur (Bhurt pore) is memorable as an instance of a British army in India having to turn back with its object unaccomplished (1805) Bhartpur was not finally taken till 1827

Later dis asters 1804 05

India after I ord Wellesley, 1805,

in the

India, Lord Lake's campaigns, 1803-05, brought the North-Western Provinces (the ancient Madhya desha) under British rule, together with the custody of the puppet Emperor. The new Districts were amalgamated with those previously acquired from the Nawáh Wazír of Oudh into the 'Ceded and Conquered Provinces'. This partition of Northern India remained till the Sikh wars of 1845 and 1848-49 gave us the Punjab. In South-eastern India, we have seen that Lord Wellesley's con-

in the

quests constituted the Madras Presidency almost as it exists In South-western India, the Peshwa was reduced to a vassal of the Company But the territories now under the Governor of Bombay were not finally built up into their present form until the last Maratha war in 1818

The financial strain caused by these great operations of I ord Wellesley had meanwhile exhausted the patience of the Court of Directors at home In 1805, Lord Cornwallis was Marquis of sent out as Governor General a second time, with instructions Cornwallis to bring about peace at any price, while Holkar was still unsubdued, and with Sindhia threatening a fresh war But Cornwallis was now an old man, and broken down in health up to the north-west during the rainy season, he sank and died at Ghazipur, before he had been ten weeks in the country

His immediate successor was Sir George Barlow, a civil Sir George servant of the Compani, who as a locum tenens had no alter-barlow, native but to carry out the commands of his employers Under these orders, he curtailed the area of British territory. and, in violation of engagements, abandoned the Rájput chiefs to the cruel mercies of Holkar and Sindhia During his administration, also, occurred the mutiny of the Madras se poys at Vellore (1806) which, although promptly suppressed, sent a shock of insecurity throughout the Empire The feebly conomical policy of this interregnum proved a most disastrous But, fortunately, the rule soon passed into firmer hand-

I ord Minto Governor General from 1807 to 1813, con Pul of solidated the conquests which Wellesley had acquired His Minto, 1807 13 only military exploits were the occupation of the island of the Mauritius, and the conquest of Java by an expedition which he accompanied in person. The condition of Central India continued to be disturbed, but Lord Minto succeeded in the venting any violent outbreaks without himself having recourse The Company had ordered him to follow a policy of non intervention, and he managed to obey his orders without injuring the prestige of the British name. Under his auspices, the Indian Government opened relations with a new set of foreign powers, by sending embassies to the Punjab, to Afghanistan, and to Persia 1 he ambassadors had been trained in the school of Wellesley, and formed, perhaps, the most illustrious trio of 'politicals' whom the Indian services have Metcalfc went as envoy to the Sikh Court of Ranjit Singh at I ahore, Elphinstone met the Shah of Afghan-

istan at Pesháwar, and Malcolm was despatched to Persia It cannot be said that these missions were fruitful of per manent results, but they introduced the English to a new set of diplomatic relations, and widened the sphere of their influence

Lord 1814-23

The successor of Lord Minto was the Earl of Moira, better Moura (Marquis of known by his later title as the Marquis of Hastings Histings), Marquis of Hastings completed Lord Wellesley's conquests in Central India, and left the Bombay Presidency almost as it stands at present. His long rule of nine years, from 1814 to 1823, was marked by two wars of the first magnitudenamely, the campaigns against the Gurkhas of Nepal, and the last Maratha struggle

The Gurkhas of Nepul

The Gurkhas, the present ruling race in Nepal, trace their descent from Hindu immigrants and claim a Ráiput origin The ind genous inhabitants, called Newars, belong to the Indo-Tibetan stock, and profess Buddhism The sovereignty of the Gurknas dates only from 1767-68, when they overran the valley of Khatmandu, and gradually extended their power over the hills and valleys of Nepul upon a military and feudal basis, they soon became a terror to their neighbours, marching east into Sikkim, west into Kumaun, and south into the Gangetic plains. In the last quarter their victims were British subjects (natives of Bengal), and it became necessary to check their advance Barlow and Lord Minto had remonstrated in vain, and nothing was left to Lord Moira but to take up arms

Nepal war 1814 15

coming the natural difficulties of a malarious climate and precipitous hills, our troops were on several occasions fairly worsted by the impetuous bravery of the little Gurkhas, whose heavy knives or kukris dealt terrible execution. But in the cold weather of 1814, General Ochterlony, who advanced by wav of the Sutles, stormed one by one the hill forts which still stud the Himalayan States, now under the Punjab Government. ind compelled the Nepal darbar to sue for peace following year, 1815, the same general made his brilliant march from Patná into the lofty valley of Khatmandu, and finally dictated the terms which had before been rejected, within a few miles of the capital By the treaty of Segauli, which defines the English relations with Nepal to the present day, the Gurkhas withdrew on the south-east from Sikkim,

and on the south nest, from their advanced posts in the outer

The first campaign of 1814 was unsuccessful

Second camij aign

Ticaty of Segaul

cedes Himalman tracts, 1815

ranges of the Himalayas, which enabled us to obtain the health giving stations of Naini Tal, Massuri, and Simla.

Meanwhile, the condition of Central India was every year The becoming more unsatisfactory The great Marathá chiefs had Pindans learned to live as princes rather than as predatory leaders But their original habits of lawlessness were being followed by a new set of freebooters, known as the Pindarís. As opposed to the Marathas, who were at least a Hindu nationality bound by the traditions of a united government, the Pindaris were merely plundering bands, closely corresponding to the free companies of medieval Europe Of no common race, and of no common Pindui religion, they welcomed to their ranks the outlaws and broken 1815 men of all India-Afghans, Marathás, or Jats They represented the debris of the Mughal Empire, which had not been incorporated by any of the local Muhammadan or Hindu powers that sprang up out of its ruins For a time, indeed, it seemed as if the inheritance of the Mughal might pass to these armies of banditti In Bengal, similar hordes had formed themselves out of the disbanded Muhammadan troops and the Hindu predatory castes But they had been dis persed under the vigorous rule of Warren Hastings Central India, the evil lasted longer, attained a greater scale, and was only stamped out by a regular war

The Pindari head-quarters were in Málwa, but their depre dations were not confined to Central India. In bands, some times of a few hundreds, sometimes of many thousands, they rode out on their forays as far as the opposite coasts of Madras and of Bombay I he most powerful of the Pindari captains, Pindari Amir Khan, had an organized army of many regiments, and lealers several batteries of cannon Two other leaders, known as Chitu and Karim, at one time paid a ransom to Sindhia of £,100,000 To suppress the Pindan hordes, who were supported by the sympathy, more or less open, of all the Maratha chiefs, I ord Hastings (1817) collected the strongest British army which had yet been seen in India, numbering 120,000 One-hilt operated from the north, the other half from the south Sindhia was overawed, and remained quiet Amir Khán disbanded his army, on condition of being guaranteed the possession of what is now the principality of Tank The remaining bodies of Pindaris were attacked in Pindari their homes, surrounded, and cut to pieces. Karim threw war, 1817 himself upon the mercy of the conquerors. Chitu fled to the jungles, and was killed by a tiger

In the same verr (1817) and almost in the same month VOL. VI 2 C

(November) as that in which the Pindaris were crushed, the three great Maráthá powers at Poona, Nagpur, and Indore rose separately against the English The Peshwá, Bají Rao, had long been chafing under the terms imposed by the treaty of Bassein (1802) A new treaty of Poona, in June 1817, now treed the Gáekwar from his control, ceded further districts to the British for the pay of the subsidiary force, and submitted all future disputes to the decision of our Government

1817 The Varatha

attack

New Maratha

treats,

Flphinstone, then our Resident at his Court, foresaw a storm, and withdrew to Kirki, whither he had ordered up a European regiment. The next day the Residency was burnt down and Kírki was attacked by the whole army of the Pesnwa. The attack was bravely repulsed, and the Peshwa immediately fled from his capital, Poon? Almost the same plot was enacted at Nagpur, where the honour of the British name was saved by the sepoys who defended the hill of Sitabaldi against enormous odds.

Last Mai itha aar, 1817 18 It had now become necessary to crush the Marathas Their forces under Holkar were defeated in the following month at the pitched battle of Mehidpur All open resistance was now at an end Nothing remained but to follow up the fugitives, and to impose conditions for a general pacification. In both these duties Sir John Malcolm played a prominent part. The dominions of the Peshwá were annexed to the Bombay Presidency, and the nucleus of the present Central Provinces was formed out of the territory rescued from the Pindaris. The Peshwa himself surrendered, and was permitted to reside at Bithúr, near Cawnpur, on a pension of £80,000 a year. His adopted son was the infamous Nána Sahib of the Mutiny of 1857.

Hombas term mes annexed 1818

Io fill the Peshwa's place, as the traditional head of the Marathá confederacy, the lineal descendant of Sivaji was brought forth from obscurity and placed upon the throne of Satara An infant was recognised as the heir of Holkar, and a second

Raputara

s ara

infant was proclaimed Raja of Nágpur under British guardianship. At the same time, the States of Rájputána accepted the position of feudatories to the paramount British power

1515 48

The map of India, as thus drawn by Lord Hastings, remained substantially unchanged until the time of Lord Dalhousie. But the proudest boast of I ord Hastings and Sir John Malcolm was, not that they had advanced the pomærium, but that they had conferred the blessings of peace and good government upon millions who had groaned under the extortions of the Marathas and Pinduis

The Marquis of Hastings was succeeded by Lord Amherst, Mr Adam. after the interval of a few months, during which Mr Adam, 1823 a civil servant, acted as Governor General The Marátha war in the Peninsula of India was hardly completed when our armies had to face new enemies beyond the sea. Lord Lord Amherst's administration lasted for five years, from 1823 to Amherst, 1823-28 1828 It is known in history by two prominent events, the first Burmese war and the capture of Bhartpur

For some years past, our north eastern frontier had been disturbed by Burmese raids Burma, or the country Ancient which fringes the western shore of the Bay of Bengal, Buima and runs up the valley of the Irawadi, has a people of I ibeto-Chinese origin, and a history of its own Tradition asserts that its civilisation was introduced from the coast of Coromandel, by a people who are supposed to preserve a trace of their origin in their name of Talaing (of Felingana) However this may be, the Buddhist religion, professed by the Burmese at the present day. certainly came from India at a very early date Waves of invasion from Siam on the south, and from the wild mountains of China in the north, have passed over the land These conquests were marked by the wanton and wholesale barbarity which seems to characterize the Tibeto-Chinese race, but the civilisation of Buddhism survived every shock, and flourished around the ancient pagodas European travellers in the 15th century visited Pegu and Tenasserim, which they Burma describe as flourishing seats of maritime trade. During the 15th con Portuguese predominance in the East, Arakan in Northern 1 D Burma became an asylum for desperate European adventurers With their help, the Arakanese conquered Chittigong on the Bengal seaboard, and (under the name of the Maghs) became the terror of the Gangetic delta About 1750, a new Burmese dynasty crose, founded by Alaung-paya or Alompra, with its capital at Ava Alompra's successors ruled Independent Burma until its annexation to British India in 1886 1

The dynasty of Alompra, after having subjugated all Burmese Burma, and overrun (1800) Assam, which was then an inde-enclouch pendent kingdom, begin a series of encroachments upon the India British Districts As they rejected all peaceful proposals with scorn, Lord Amherst was at last compelled to declare war in 1824 Little military glory could be gained by beating First Bir the Burmese, who were formidable chiefly from the pestilential mese war,

<sup>1</sup> For the history of Burma, see the articles BURMA, PRITISH, and BURMA, INDELENDENT, in The Imp rial Gazetteer of India

character of their country. One expedition with gunboats proceeded up the Brahmaputra into Assam. Another marched by land through Chittagong into Arakan, as the Bengal sepoys refused to go by sea. A third, and the strongest, sailed from Madras direct to the mouth of the Irawadi. The war was protracted over two years. After a loss to us of about 20,000 lives, chiefly from disease, and an expenditure of £14,000,000, the King of Ava signed, in 1826, the treaty of Yandabu. By this he abandoned all claim to Assam, and ceded the Provinces of Arakan and Tenasserim, already in the military occupation of the British. He retained the whole valley of the Irawadi, down to the sea at Rangoon.

Assam etc, annexed, 1826

Phartpur taken, 1827 The capture of Bhartpur in Central India by Lord Combermere, in January 1827, wiped out the repulse which Lake had received before that city in January 1805. A disputed succession led to the British intervention. Artillery could make little impression upon the massive walls of mud. But at last a breach was effected by mining, and the city was taken by storm, thus removing the popular notion throughout India that it was impregnable—a notion which had threatened to become a political danger.

Lerd William Bentinck, 1828-35

The next Governor General was Lord William Bentinck, who had been Governor of Madras twenty years earlier, at the time of the mutiny of Vellore (1806) His seven years' rule (from 1828 to 1835) is not signalized by any of those victories or extensions of territory by which chroniclers measure the growth of an Empire But it forms an epoch in administrative reform, and in the benign process by which a subject population is won over to venerate as well as to dread its alien The modern history of the British in India, as bene volent administrators, ruling the country with an eye to the good of the natives, may be said to begin with Lord According to the inscription upon his William Bentinck statue at Calcutta, from the pen of Macaulay 'He abolished cruel rites, he effaced humiliating distinctions, he gave liberty to the expression of public opinion, his constant study was to elevate the intellectual and moral character of the nations committed to his charge'

His imapoial reforms I ord William Bentinck's first care on arrival in India was to restore equilibrium to the finances, which were tottering under the burden imposed upon them by the Burmese war. This he effected by three scries of measures—first, by reductions in permanent expenditure, amounting to 13 million

sterling a year, second, by augmenting the revenue from lands which had surreptitiously escaped assessment, third, by duties on the opium of Malwá He also widened the gates by which educated natives could enter the service of the Company Some of these reforms were distasteful to the covenanted service and to the officers of the army But Lord William was staunchly supported by the Court of Directors and by the Whig Ministry at home

His two most memorable acts are the abolition of sati, or Abolition widow-burning, and the suppression of the thags At this of sati, distance of time it is difficult to realize the degree to which these two barbarous practices had corrupted the social system of the Hindus European research has clearly proved that the text in the Vedas adduced to authorize the immolation of widows, was a wilful mistranslation 1 But the practice had been enshrined in Hindu opinion by the authority of cen turies, and had acquired the sanctity of a religious rite Emperor Akbar prohibited it, but failed to put it down early English rulers did not dare to violate the religious traditions of the people In the year 1817, no less than 700 widows are said to have been burned alive in the Bengal To this day, the holy spots of Hindu Presidency alone pilgrimage are thickly dotted with little white pillars, each commemorating a satt In spite of strenuous opposition, both from Europeans and natives, Lord William Bentinck carried a regulation in Council on the 4th December 1829, by which all who abetted satt were declared guilty of 'culpable homicide'

The honour of suppressing thagi must be shared between Suppres-Lord William Bentinck and Captain Sleeman Thags were sion of thags hereditary assassins, who made strangling their profession They travelled in bands, disguised as merchants or pilgrims, and were sworn together by an oath based on the rites of the bloody goddess Kálı Between 1826 and 1835, as many as 1562 thags were apprehended in different parts of British India, and, by the evidence of approvers, these abominable brotherhoods were gradually stamped out.

I wo other historical events are connected with the admini- Renewal stration of Lord William Bentinck In 1833, the Charter of of charter, the East India Company was renewed for twenty years, bu upon the condition that the Company should abandon its trade and permit Europeans to settle in the country. At the same time, a fourth or 'Law member' was added to the Governor General's Council, who might not be a servant of the

Company, and a Commission was appointed to revise and codify the law Macaulay was the first Law-member of Council, and the first President of the Law Commission

Mysore protected, 1830

Coorg annexed, 15,4

In 1830-31, it was found necessary to take the State of Mysore under British administration It continued so up to March 1881, when it was restored to native government 1834, the frantic misrule of the Rájá of Coorg brought on a sharp and short war The Raja Linguraj was permitted to retire to Vellore, then to Benares, and finally to England, where The brave and proud inhabitants of his mountainous little territory decided to place themselves under the sway of the Company This was the only annexation effected by Lord William Bentinck, and it was done 'in consideration of the unanimous wish of the people'

Lord Metcalfe, 1835-36

Sir Charles (afterwards Lord) Metcalfe succeeded Lord William as senior member of Council His short term of office is memorable for the measure which his predecessor had initiated, but which he carried into execution, for giving entire liberty to the press From this time the Indian Government lost the power of deporting journalists who made themselves formidable by their pens Public opinion in India, as well as the express wish of the Court of Directors at home pointed to Metcalfe as the fittest person to carry out the policy of Bentinck, not provisionally, but as Governor General for a full term

Loid 1536-42

Party exigencies, however, led to the appointment of I ord luckland, Auckland From this date commences a new era of war and conquest, which may be said to have lasted for twenty years All looked peaceful until I ord Auckland, prompted by his evil genius, attempted by force to place Shah Shuja upon the throne of Kábul, an attempt conducted with gross mismanagement, and ending in the annihilation of the British garrison placed in that city

Af\_han the Durani,

For the first time since the days of the Sultans of Ghazni istanumler and Ghor, Afghanistán had obtained a national king in 1747 in Ahmad Shah Durani. This resolute soldier found his 1747-1826 opportunity in the confusion which followed the death of the Persian conqueror, Nadir Shah Before his own decease in 1773. Ahmad Sháh had conquered a wide empire, from Herát to Peshawar, and from Kashmir to Sind His intervention on the field of Pánípat (1761) turned back the tide of Marátha conquest, and replaced a Mughal Emperor on the throne of But Ahmad Sháh never cared to settle down in India,

and alternately kept state at his two Afghan capitals of Kabul and Kandahar The Durání kings were prolific in children, who fought to the death with one another on each succession At last, in 1826, Dost Muhammad, head of the powerful Barakzai family, succeeded in establishing himself as ruler of Kabul, with the title of Amir, while two fugitive brothers of the Duraní line were living under British protection at Ludhiana. on the Punjab frontier

The attention of the English Government had been directed Our early to Afghan affairs ever since the time of Lord Wellesley, who deal ngwith feared that Zaman Shah, the Afghán Amir, then holding his court Kabul, at Lahore (1800), might follow in the path of Ahmad Sháh, 1800-37 and overrun Hindustan The growth of the powerful Sikh kingdom of Ranjit Singh effectually dispelled these alarms Subsequently, in 1809, while a French invasion of India was still a possibility to be guarded against, Mountstuart Elphinstone was sent by Lord Minto on a mission to Shah Shujá to form a defensive alliance Before the year expired, Shah Shuja had been driven into exile, and a third brother, Mahmud Shah, was on the throne In 1837, when the curtain rises upon the drama of English interference in Afghánistan, the usurper Dost Muhammad, Barakzai, was firmly established at Kabul Dost Mu His great ambition was to recover Peshawar from the Sikhs hammed 18,57 When, therefore, Captain Alexander Burnes arrived on a mission from Lord Auckland, with the ostensible object of opening trade, the Dost was willing to promise everything if only he could get Peshawar

But Lord Auckland had another and more important object in view. At this time the Russians were advancing Russian rapidly in Central Asia, and a Persian army, not without influence Russian support, was besieging Herát, then as now the bulwark of Afghánistan on the west. A Russian envoy was at Kabul at the same time as Burnes The latter was unable to satisfy the demands of Dost Muhammad in the matter of Pesháwar, and returned to India unsuccessful Lord Auckland forthwith resolved upon the hazardous plan of placing a more subservient ruler upon the throne of Kabul

Shah Shujá, one of the two exiles of Ludhiana, was selected for the purpose At this time both the Punjab and Sind were independent kingdoms. Sind was the less powerful of the two, and accordingly a British army escorting Shah Shuji made its why by that route into southern Afghanistan through the Bolan Pass Kandahar surrendered, Ghazni was taken by Dost Muhammad fled across the Hindu Kush, and storm

Shah Shuja installed. 1839

Kabul occupied,

1839-41

Sháb Shuja was triumphantly led into the Bala Hissar at Kabul in August 1830 After one more brave struggle, Dost Muhammad surrendered, and was sent to Calcutta as a State prisoner

But although we could enthrone Shah Shujá, we could not win for him the hearts of the Afghans To that nation he seemed a degenerate exile thrust back upon them by foreign During two years, Afghanistan remained in the military The catastrophe occurred in occupation of the British November 1841, when our Political Agent, Sir Alexander Burnes, was assassinated in the city of Kabul The troops in the cantonments were under the command of General Elphinstone (not to be confounded with the able civilian and historian, the Hon Mountstuart Elphinstone) Sir William Macnaghten was the political officer Elphinstone, an old man, proved unequal to the responsibilities of the position Macnaghten was treacherously murdered at an interview with

the Afghán chief Akbar Khan, eldest son of Dost Muhammad

The winter retreat

After lingering amid disgraceful dissensions and with fatal indecision in their cantonments for two months, the British army set off in the depth of winter, under a fallacious guarantee from the Afghán leaders, to find its way back to India through the passes When they started, they numbered 4000 fighting men with 12,000 camp followers A single sur vivor, Dr Brydon, reached the friendly walls of Jalálabad, where Sale was gallantly holding out. The rest perished in ated, 1842 the snowy defiles of Khurd Kabul and Jagdalak, from the knives and matchlocks of the Afgháns, or from the effects of A few prisoners, chiefly women, children, and officers,

()m gariison annihi

The first Afghán enterprise, begun in a spirit of aggression, and conducted amid disagreements and mismanagement, had The shick ended in the disgrace of the British arms | The real loss, which amounted only to a single garrison, and cost fewer soldiers than many a victory, was magnified by the horrors of the winter march, and by the completeness of the annihilation.

were considerately treated by the orders of Akbar Khan

in Eng land

Larl of 1 ilen borough, 1312-44

The a my of retribu tion, 1842

Within a month after the news reached Calcutta, Lord Auckland had been superseded by Lord Flienborough, whose first impulse was to be satisfied with drawing off in safety the garrisons from Kandahar and Jalálabád. But bolder counsels were forced upon him General Pollock, who was marching straight through the Punjab to relieve Sale, was allowed to penetrate to Kabul General Nott, although ordered to with draw from Afghanistan, resolved to take Kabul on the way!

I ord Ellenborough gave his commands in well-chosen words. which would leave his Generals responsible for any disaster 1 General Nott took that responsibility, and instead of retreating south-east to the Indus, boldly marched north in nearly the opposite direction to Kábul After hard fighting, the two British forces, under Pollock and Nott, met at their common destination at Kábul City in September 1842 The great bazár at Kabul was blown up with gunpowder, to fix a stigma upon the city, the prisoners were recovered, and the British troops marched back to India, leaving Dost Muhammad to take undisputed possession of his throne

The drama closed with a bombastic proclamation from Lord The Ellenborough, who had caused the gates from the tomb of Gates of Somnath, Mahmud of Ghazni to be carried back as a memorial of 1842 'Somnath revenged' Lord Ellenborough, in his craze for historical melodrama, declared these doors to be the ones carried away from the spoliation of the Somnáth temple by Mahmud of Ghazni, 1024 A D 2 The gates were a modern forgery, and their theatrical procession through the Puniab formed a vainglorious sequel to Lord Ellenborough's diffidence, while the fate of our armies hung in the balance trionic travesty which closed the first Kabul war was scarcely less distasteful to the serious English mind than the unrighteous interference which led to its commencement, or the follies and feeble division of counsels which produced its disasters

I ord Lllenborough, who loved military pomp, had his taste Sind way, gratified by two more wars. In 1843, the Muhammadan rulers 1843 of Sind, known as the Mirs or Amirs, whose chief fault was that they would not surrender their independence, were crushed by Sir Charles Napier The victory of Minni, in which 3000 British troops defeated 20,000 Baluchis, is one of the brilliant feets of arms in Anglo-Indian history But valid reasons can scarcely be found for the annexation of the In the same year, a disputed succession at Gwalior, Gwalior fomented by feminine intrigue, resulted in an outbreak of the 1843 overgrown army which the Sindhia family kept up Peace was restored by the battles of Maharupur and Punniah, at the former of which Lord Ellenborough was present in person

In 1844, I ord Fllenborough was recalled by the Court of

<sup>1</sup> Ih Indian Administration of I and Ellenborough, being his Corre spondence I dited by Lord Colchester, 1874 See Lord Llienborough's own I etters, pp 29, 30, 39, etc

<sup>2</sup> I i h ant, chap x p 274

Lord Hardinge, 1544-48 Directors, who differed from him on points of administration, disliked his theatrical display, and distrusted his erratic genius. He was succeeded by Sir Henry (afterwards Lord) Hardinge, who had served through the Peninsular war, and lost a hand at Ligny. It was felt on all sides that a trial of strength between the British and the remaining Hindu power in India, the great Sikh nation, drew near

I he Sil hs, 1469

Nanak Shah

The Sikhs were not a nationality like the Marathas, but a religious sect bound together by the additional tie of military discipline They trace their origin to Nanak Sháh, a pious Hindu reformer, born near Lahore in 1469, before the ascendancy of either Mughals or Portuguese in India Nának, like other zealous preachers of his time, preached the abolition of caste, the unity of the Godhead, and the obligation of leading a pure life 1 From Nának, ten gurus or apostles are traced down to Govind Singh in 1708, with whom the succession stopped Cruelly persecuted by the ruling Muhammadans, almost exterminated under the miserable successors of Aurangzeb,2 the Sikh martyrs clung to their faith with unflinching zeal. At last the downfall of the Mughal Empire transformed the Sikh sect into a territorial power the only political organization remaining in the Punjab Sikhs in the north, and the Marathas in Southern and Central India, thus became the two great Hindu powers who partitioned the Mughal Empire Even before the rise of Ranift Singh, offshoots from the Sikh mish or confederacies, each led by its elected sardar, had carved out for them

Sich con fe leracies

Kanjit Singl 1780 1839 Ranjít Singh, the 'Lion of the Punjab' and founder of the Sikh kingdom, was born in 1780. In his twentieth year he obtained the appointment of Governor of Lahore from the Afghán Amír, and formed the project of erecting his personal rule upon the fanaticism of his Sikh countrymen. He organized their church militant, or 'the liberated,' into an army under European officers, which for steadiness and religious fervour has had no parallel since the 'Ironsides' of Cromwell From Lahore, as his capital, he extended his conquests south to Múltan, west to I'cshawar,

selves feudal principalities along the banks of the Sutlei,

some of which endure to the present day

Hi kingdom

<sup>&</sup>lt;sup>1</sup> Vide ante, pp 207-8 The life of Nanak and growth of his sect are summarized in articles AMRIINAR and PUNJAB, The Imperial Gasetteer of India. The religious aspects of the Sikhs are fully treated in Wilson's Religion of the Hindias, vol. 1 pp. 267-275 (cd. 1862).

<sup>2 1</sup> ide ante, p 314

and north to Kashmir On the east side alone he was hemmed in by the Sutlei, up to which river the authority of the British Government had advanced in 1804 Until his death, in 1839, Ranut Singh was ever loyal to the engagements which he had entered into with Metcalfe in 1800. But he left no son capable of wielding his sceptre Lahore was torn by dissensions between rival generals, ministers, and queens Its dis The only strong power was the army of the Central Com-sensions mittee of Generals or khálsá,1 which, since our disaster in Afghánistan, burned to measure its strength with the British The French or European Generals, Avitabile and Court, were foolishly ousted by the Sikh commanders, and the supreme military command was vested in a series of pancháyats or elective committees of five

In 1845, the Sikh army, numbering 60,000 men with 150 First guns, crossed the Sutley and invaded British territory Sir Sikh wai Hugh Gough, the Commander-in Chief, together with the Governor-General, hurried up to the frontier Within three weeks, four pitched battles were fought, at Múdkí, Firozshahr, Aliwál, and Sobráon The British loss on each occasion was heavy, but by the last victory, the Sikhs were fairly driven back into the Sutles, and Lahore surrendered to the British The British, however, declined to annex the prostrate province, but appointed a Sikh protectorate By the terms of peace which we then dictated, the infant son of Ranjit, Dhulip Dhulip Singh, was recognised as Rajá, the Jalandhar Doáb, or tract Singh, between the Sutley and the Ráví, was annexed to British territory, the Sikh army was limited to a specified number, Major Henry Lawrence was appointed Resident, to assist the Sikh Council of Regency, at Lahore, and a British force was sent to garrison the Punjab on behalf of the child Rája Governor General, Sir H Hardinge, received a peerage, and returned to England in 1848

Lord Dalhousie succeeded The eight years' rule of this Earl of greatest of Indian proconsuls (1848–56) left more conspicuous Dalhouse, 1848–56 results than that of any Governor-General since Clive high-minded statesman, of a most sensitive conscience, and earnestly desiring peace, Lord Dalhousie found himself forced against his will to fight two wars, and to embark on a policy His campaigns in the Punjab and in Burma of annexation

1 The Persian word khalisah, literally 'puie' or 'sincere,' means in Indian official language the royal exchequer, and hence more loosely the bureau of the central administration

His admini strative reforms ended in large acquisitions of territory, while Nagpur, Oudh, and several minor States also came under British rule. But I) alhousie's deepest interest lay in the advancement of the moral and material condition of the country. His system of administration carried out in the conquered Punjab, by the two Lawrences and their assistants, is probably the most successful piece of difficult work ever accomplished by Englishmen. British Burma has prospered under our rule not less than the Punjab. In both cases, Lord Dalhousie himself laid the foundations of our administrative success, and deserves a large share of the credit

His Public Works

No branch of the administration escaped his reforming hand He founded the Public Works Department, with a view to creating the network of roads, railways, and canals which now cover India. He opened the Ganges Canal, still the largest work of the kind in the country, and he turned the sod of the first Indian railway He promoted steam communi cation with England zu the Red Sea, and introduced cherp postage and the electric telegraph. It is Lord Dalhousie's misfortune that these benefits are too often forgotten in the recollections of the Mutiny, which followed his policy of annexation, after the firm hand which had remodelled British India was withdrawn But history is com lelled to record not only that no other Governor-General since the time of Lord Wellesley had ruled India with such splendid success from the military and political point of view, but also that no other Governor General had done so much to improve the internal administration since the days of Warren Hastings

Second Sikn war 1848-49 Lord Dalhousie had not been six months in India before the second Sikh war broke out. The attempt to govern the Punjab by a Sikh protectorate broke down. The Council of Regency was divided against itself, corrupt and weak. The Queen-Mother had chosen her paramour as prime immister. In 1848, the storm broke. Two British officers were treacherously assassinated at Multan. Unfortunately, Henry Lawrence was at home on sick leave. The British army was not ready to act in the hot weather, and, despite the single-handed exertions of Lieutenant (afterwards. Sir Heibert) I dwardes, this outbreak of fanaticism led to a general rising of the Sikh confederacies.

The khálsá army agun came together, and once more fought Chihan on even terms with the British On the fatal field of Chihanwala, wida, 184) which our patriotism prefers to call a drawn battle, the British

<sup>1</sup> See atticles CHILIANN AT Land Gt JRAL, The Imperial Gasetteer of India

lost 2400 officers and men, besides four guns and the colours of three regiments (13th January 1849) But before reinforcements could come out from England, bringing Sir Charles Napier as Commander-in-Chief, Lord Gough had restored his reputation by the crowning victory of Gujrat, which absolutely Gujrat destroyed the Sikh army Multan had previously fallen, and victory the Afghán horse under Dost Muhammad, who had forgotten their hereditary antipathy to the Sikhs in their greater hatred of the British name, were chased back with ignominy to their native hills The Punjab, annexed by proclamation on the 29th March 1849, 1 became a British Province—a virgin field for the administrative talents of Dalhousie and the two I awrences Maharájá Dhulíp Singh received an allowance of £,58,000 a year, on which he now lives as an English country gentleman in Norfolk

The first step in the pacification of the Punjab<sup>2</sup> was a general The disarmament, which resulted in the delivery of no fewer than annexed, 120,000 weapons of various kinds. Then followed a settle-1849 ment of the land-tax, village by village, at an assessment much Its pacifi below that to which it had been raised by Sikh exactions, and cation the introduction of a loose but equitable code of civil and criminal procedure Roads and canals were laid out by Colonel Robert Napier (afterwards I ord Napier of Magdala) The security of British peace, and the personal influence of British officers, inaugurated a new era of prosperity, which was felt to the farthest corners of the Province It thus happened that, when the Mutiny broke out in 1857, the Punjab remained not only quiet, but loval

The second Burmese war, in 1852, arose out of the ill Second treatment of some European merchants at Rangoon, and the Burmese war, 18,2 insults offered to the captain of a British frigate who had been sent to remonstrate 8 The lower valley of the Irawadi, from Rangoon to Prome, was occupied in a few months, and as the King of Ava refused to treat, it was annexed by proclama-Brush tion on the 20th December 1852, under the name of Pegu, burning the na to the Provinces of Arakan and Tenasserim acquired in 1826 1852

Since annexation, the inhabitants of the town of Ran goon have multiplied nearly fifteen-fold. The trade of this

<sup>&</sup>lt;sup>1</sup> In terms of the agreement with Maharaja Dhulip Singh, of same date -Aitchison's Treaties and Engagements, vol vi p 47 (ed 1876)

<sup>2</sup> For the annexation and administrative history of the Punjab, see article Punjap in The Imperial Gautteer of Inlia

I or further details, see article Bi RMA, The Imperial Gastless of India

port, which four years after annexation (1857–58) only amounted to £2,131,055, had increased to £8,192,025 in 1877–78, and to £13,174,094 in 1883  $^{1}$ 

Its pros penty under our rule

The towns and rural parts have alike prospered unnexation in 1826, Amherst District was the scene of perpetual warfare between the Kings of Siam and Pegu, and was stripped In February 1827, a Talaing chief with 10,000 of inhabitants followers settled in the neighbourhood of Maulmain, and after a few years, a further influx of 20,000 immigrants took In 1855, the population of Amherst District amounted to 83,146 souls, in 1860, to 130,953, in 1875, to 275,432, and in 1881, to 301,086 Or, to take the case of a seaport, -in 1826, when we occupied that part of the Province, Akyab was a poor fishing village By 1830, it had developed into a little town with a trade valued at £7000 In 1879, the trade exceeded 2 millions sterling, so that the trade of Akyab had multiplied itself close on three hundred-fold in fifty years

I he Feudatory States

Lord Dalhousie's dealings with the Feudatory States of India revealed the whole nature of the man That rulers only exist for the good of the ruled, was his supreme axiom of government, of which he gave a conspicuous example in his own daily life That British administration was better for the people than native rule, followed from this axiom thus led to regard native chiefs from somewhat the same point of view as the Scotch regarded the hereditary jurisdictions after 1745, namely, as mischievous anomalies, to be abolished by Good faith must be kept with rulers on every fair means the throne, and with their legitimate heirs. But no false sentiment should preserve dynasties which had forfeited our sympathies by generations of misrule, nor prolong those that had no natural successor The 'doctrine of lapse' was the practical application of these principles, complicated by the Indian practice of adoption

doc inc of

11-1

According to Hindu private law, an adopted son entirely directine of fills the place of a natural son, whether to perform the religious obsequies of his father or to inherit his property. In all respects he continues the persona of the deceased. But it was argued that, both as a matter of historical fact and as one of political expediency, the succession to a throne stood upon a

<sup>1</sup> See article RANGOON, *The Imperial Gazettees of India* For growth of trade in other Burmese ports, see also article AKYAB, *The Imperial Gazetteer of India* 

different footing It was affirmed, not always with a complete knowledge of the facts, that the Mughal Emperors had asserted an interest in successions to the great fiefs, and demanded heavy payments for recognising them 
It was therefore maintained that the paramount power could not acknowledge without limitations a right of adoption, which might be used as a fraud to hand over the happiness of millions to a base-born impostor Here came in Lord Dalhousie's maxim of 'the good of the governed' In his mind, benefits to be conferred through British administration weighed heavier than a superstitious and often fraudulent fiction of inheritance

The first State to escheat to the British Government in Lapsed accordance with these principles was Satara, which had been States reconstituted by Lord Hastings on the downfall of the Peshwa Satara, 1849 The Rajá of Satára, the last lineal representative or Sivaji, died without a male heir in 1848, and his deathbed adoption was set aside (1849) In the same year, the independence of the Rajput State of Karauli was saved by the Court of Directors, who drew a fine distinction between a dependent principality and a protected ally In 1853, Jhánsí suffered the Jhansi same fate as Satara

But the most conspicuous application of the doctrine of lapse \agpir, was the case of Nagpur The last of the Marátha Bhonslas, 1853 a dynasty older than the British Government itself, died without a son, natural or adopted, in 1853. His territories were annexed, and became the Central Provinces That year also saw British administration extended to the Berars, or the Assigned Berais British administration extended to the Delais, of the Libsights 2011.

Districts, which the Nizim of Haidarabad was induced to hand handed over, 1855 over to us as a territorial guarantee for his arrears of subsidy. and for the pay of the Haidarábád contingent which he perpetually kept in arrear The relics of three other dynasties also passed away in 1853, although without any attendant accretion to British territory In the extreme south the titular Nawab of the Karnatik and the titular Ráií of Taniore both died without heirs Their rank and their pensions died with them, but compassionate allowances were continued to their families In the north of India, Báil Rao, the ex-Peshwa who had been dethroned in 1818, lived on till 1853 in the enjoyment of his unnual pension of £80,000 His adopted son, Nana Sahib, inherited his accumulated savings, but could obtain no further recognition

Lord Dalhousie annexed the Province of Oudh on different Annexa Ever since the Nawab Wazír, Shujá-ud-Daulá, tion of Oudh, received back his forfeited territories from the hands of I ord 1856

Clive in 1765, the existence of his dynasty had depended on the protection of British bayonets 1 Guarded alike from foreign invasion and from domestic rebellion, the long line of Navábs had sunk into private debauchees and public oppressors Their one virtue was steady loyalty to the British The fertile districts between the Ganges and Government the Gogra, which now support a denser population than any rural area of the same size on the globe, had been groaning for generations under an anarchy for which each British Governor-General felt himself in part responsible Warning after warning had been given to the Nawabs (who had assumed the title of Shah or King since 1819) that they must put their house in order

I ord Dal housie's view of the measure

innexa

Lun

What the benevolent Bentinck and the soldierly Hardinge had only threatened, was reserved for I ord Dalhousie, who united honesty of purpose with stern decision of character, He laid the whole case before the Court of Directors, who, after long and painful hesitation, resolved on Lord Dalhousie, then on the eve of retiring, felt that it would be unfair to leave the perilous task to his successor in the first moments of his rule The tardy decision of the Court of Directors left him, however, only a few weeks to carry out the work But he solemnly believed that work to be his duty to the people of Oudh 'With this feeling on mix mind,' he wrote in his private diary, 'and in humble reliance on the blessing of the Almighty (for millions of His creatures will draw freedom and happiness from the change), I approach the execution of this duty, gravely and not without solicitude. but calmly and altogether without doubt'

At the commencement of 1856, the last year of his rule, he issued orders to General (afterwards Sir James) Outram, then Resident at the Court of Lucknow, to assume the direct Crounds of administration of Oudh, on the ground that 'the British Government would be guilty in the sight of God and man if it were any longer to aid in sustaining by its countenance an administration fraught with suffering to millions' The prociamation was issued on the 13th February 1856 Wand Ali, bowed to irresistible force, although he refused to recognise the justice of his deposition After a mission to England, consisting of his mother, brother, and son, by way of protest and appeal, he settled down in the pleasant suburb of Garden Reach near Calcutta There he still lives (1885) in

For the history of Oudh since 1765 and the misrule which compelled its annexation, see article Othit, The Imperial Gazetteer of India

the enjoyment of a pension of £120,000 a year Oudh was thus annexed without a blow But this measure, on which Lord Dalhousie looked back with the proudest sense of rectitude, was perhaps the one act of his rule that most alarmed native public opinion

The Marquis of Dalhousie resigned office in March 1856, being then only forty-four years of age, but he carried home with him the seeds of a lingering illness, which resulted in his death in 1860 Excepting Cornwallis, he was the first, although Lord Dal by no means the last, of English statesmen who have fallen housies death, victims to their devotion to India's needs

Lord Dalhousie completed the fabric of British rule in India The Empire as mapped out by Lord Wellesley and Lord His work Hastings, during the first quarter of the century, had received in India the addition of Sind in 1843. The Marquis of Dalhousie hnally filled in the wide spaces covered by Oudh, by the Central Provinces, and by smaller States within India, together with the great outlying territories of the Punjab on the North-Western Frontier, and the richest part of British Burma beyond the sea

The great Governor General was succeeded by his friend Lord Canning, who, at the farewell banquet in England given Earl to him by the Court of Directors, uttered these prophetic Cannirg, words, 'I wish for a peaceful term of office But I cannot forget that in the sky of India, serene as it is, a small cloud may arise, no larger than a man's hand, but which, growing larger and larger, may at last threaten to burst and overwhelm us with ruin' In the following year, the Sepoys of the Bengal The Sepoy army mutinied, and all the valley of the Ganges from Patna to 1857 Delhi rose in rebellion

The various motives assigned for the Mutiny appear inade-Causes quate to the European mind The truth seems to be that of the Mutiny native opinion throughout India was in a ferment, predisposing men to believe the wildest stories, and to rush into action in a paroxysm of terror Panic acts on an oriental population like drink among a European mob The annexation policy of Lord Dalhousie, although dictated by the most enlightened considerations, was distasteful to the native mind The spread of education, the appearance of the steam engine and the telegraph wire, seemed simultaneous disclosures of a deep plan to substitute an English for an Indian civilisation

The Bengal Sepoys thought that they could see farther than Temper the rest of their countrymen Most of them were Hindus of of the Sepoys VOL VI

high caste, many of them were recruited from Oudh regarded our reforms on Western lines as attacks on their own nationality, and they knew at first hand what annexation They believed it was by their prowess that the Punjab had been conquered, and that all India was held The numerous dethroned princes, or their heirs and widows, were the first to learn and to take advantage of this spirit of disaffection and They had heard of the Crimean war, and were told that Russia was the perpetual enemy of England Our munificent pensions had supplied the funds with which they could buy the aid of skilful intilguers They had much to gain, and little to lose, by a revolution

The "\_irred cartridges, 1857

In this critical state of affairs, of which the Government had scant official knowledge, a rumour ran through the cantonments that the cartridges of the Bengal army had been greased with the fat of cows and pigs. This was affirmed to be part of a general plot by the British Government to destroy the religion alike of the Hindu and of the Muhammadan Sepoy matter of fact, cow's tallow had been culpably and ignorantly used Steps were taken to prevent the defiling cartridges from reaching the hands and mouths of the native army assurances could quiet the minds of the Sepoys occurred nightly in the native lines officers were insulted by their men, confidence was gone, and scarcely the form of discipline remained

The events which followed form contemporary annals narrative of them beyond the barest summary would involve the criticism of measures on which history has not yet pronounced her calm verdict, and would lead to personal praise or blame of still living men 1 Each episode of the Mutiny is treated in The Imperial Gazetteer of India, under the town or District where it occurred But it may not be out of place to mention here, that the outbreak of the storm found the native regiments denuded of many of their best officers drained of The administration of the great Empire, to which Dalhousic but the corner-stone, required a larger staff than the end service could supply The practice of scleeting the ablest military men for civil posts, which had long existed, received a sudden and vast development Oudh, the Punjab, the Central Provinces, British Burma, were administered to a large extent

The arms its talent

The Mutiny of 1857 has already a copious literature Sir John Kave's History of the Sepoy War (3 vols ), with its able and eloquent continuation by Colonel Malleson, C S I, as The History of the Indian Muting (3 vols ), forms the standard work

by picked officers from the Company's regiments skilful commanders remained, but the native army had nevertheless been drained of many of its brightest intellects and firmest wills at the very crisis of its fate

On the afternoon of Sunday, 10th May 1857, the Sepoys at Outbreak Meerut (Merath) broke into open mutiny <sup>1</sup> They burst into of the Mutiny, the jail, and rushed in a wild torrent through the cantonments, May 1857 cutting down a few Europeans whom they met They then streamed off to the neighbouring city of Delhi, to stir up the native garrison and the criminal population of that great city, and to place themselves under the authority of the discrowned Mughal Emperor Meerut was the largest military station in AtMeerut Northern India, with a strong European garrison of foot, horse, and guns, sufficient to overwhelm the mutineers before ever they reached Delhi. But as the Sepoys acted in irrational haste, so the British officers, in but too many cases, acted with equally irrational indecision. The news of the outbreak was telegraphed to Delhi, and nothing more was done that night At the moment when one strong will might have saved India, no soldier in authority at Meerut seemed able to think or act The next morning the Muhammadans of Delhi rose, and all that At Delhi the Europeans there could do was to blow up the magazine

I tallying centre and a traditional name were thus given to the revolt, which forthwith spread like wild-fire through the North Western Provinces and Oudh down into Lower Bengal The same narrative must suffice for all the outbreaks, although each episode has its own story of sadness and devotion Sepoys rose on their officers, usually without warning, sometimes Spread after protestations of fidelity The Europeans, or persons of of the Mutiny, Christian faith, were frequently massacred occasionally, also, summer the women and children The jail was broken open, the treasury of 1857 plundered, and the mutineers marched off to some centre of revolt, to join in what had now become a national war

In the Punjab the Sepoys were anticipated by measures of repression and disarinament, carried out by Sir John Lawrence and his lieutenants, among whom Edwardes and Nicholson The Sikh population never wavered Loyalty of stand conspicuous Crowds of willing recruits came down from the Afghan hills the Sikhs And thus the Punjab, instead of being itself a source of danger, was able to furnish a portion of its own garrison for the siege of Delhi In Lower Bengal many of the Sepoys mutinied, and then dispersed in different directions native armies of Madras and Bombay remained true to their

1 See article MEERUI, The Impe ial Gazettee of India

colours In Central India, the contingents of some of the great chiefs sooner or later joined the rebels, but the Muhammadan State of Haidarabád was kept loyal by the authority of its able minister, the late Sir Sálar Jang

Counpir

The main interest of the Sepoy War gathers round the three cities of Cawnpur, Lucknow, and Delhi Cawnpur contained one of the great native garrisons of India At Bithúr, not far off, was the palace of Dundhu Panth, the heir of the last Peshwa (ante, pp 324, 402), who had inherited his savings, but had failed to procure a continuance of his pension, and whose more familiar name of Nána Sahib will ever be handed down to infamy At first the Nana was profuse in his professions of lovalty, but when the Sepoys at Cawnpur mutinied on the 6th June he put himself at their head, and was proclaimed Peshwa of the Marathas

**∖**ana **∖**ahib

Our ill chosen position

Massacre of Cawn pur

Lucknow

Sir Henry Lawrence

The Europeans at Cawnpur, numbering more women and children than fighting men, shut themselves up in an ill chosen hasty entrenchment, where they heroically bore a siege for nineteen days under the sun of a tropical June had courage and endurance to suffer or to die, but the directing mind was again absent. On the 27th June, trusting to a safe conduct from the Nana as far as Allahabád, they surrendered, and, to the number of 450, embarked in boats on the Ganges Forthwith a murderous fire was opened upon them from the river bank. Only a single boat escaped, and but four men, who swam across to the protection of a friendly Rija, ultimately survived to tell the tale of the men were massacred on the spot The women and children numbering 125, were reserved for the same fate on the 15th July, when the avenging army of Havelock was at hand 1 Sir Henry Lawrence, the Chief Commissioner of Oudh, had

toreseen the storm He fortified and provisioned the Residency at Lucknow, and thither he retired with all the Furopean inhabitants and a weak British regiment on 2nd July Two days later, he was mortally wounded by a shell. Whatever opinion may be formed of Sir Henry Lawrence's capacity is a soldier in his one unfortunate engagement, he clearly perceived the main strategic and political points in the struggle. Lawrence had deliberately chosen his position, and the little garrison held out under unparalleled hardships and against enormous odds, until relieved by Havelock and Outram on 25th September. But the relieving force was itself invested by fresh swarms of rebels, and it was not until November that

<sup>1</sup> See article (Anning, The Imperial Gazettee of India

Sir Colin Campbell (afterwards Lord Clyde) cut his way into Lucknow, and effected the final deliverance of the garrison (16th November 1857) Our troops then withdrew to more urgent work, and did not finally re-occupy Lucknow till March 1858

The siege of Delhi began on 8th June, one month after Siege of the original outbreak at Meerut Siege in the proper sense Delhi, of the word it was not, for the British army, encamped on Sept the historic 'ridge,' at no time exceeded 8000 men, while the 1857 rebels within the walls were more than 30,000 strong In the middle of August, Nicholson arrived with a reinforcement from Nicholson the Punjab, but his own inspiring presence was even more valuable than the reinforcement he brought On 14th September the assault was delivered, and after six days' desperate fighting in the streets, Delhi was again won Nicholson fell at the head of the storming party Hodson, the intrepid leader of a corps of irregular horse, hunted down next day the old Mughal Emperor, Bahádur Shah, and his sons The Emperor was afterwards sent a State prisoner to Rangoon, where he lived till 1862 As the mob pressed in on the guard around the Emperor's sons, near Delhi, Hodson found it necessary to shoot down the princes (who had been captured uncondition ally) with his own hand 2

After the fall of Delhi and the final relief of Lucknow, the Oudh war loses its dramatic interest, although fighting went on in reduced various parts of the country for eighteen months longer. The population of Oudh and Rohilkhand, stimulated by the presence of the Begam of Oudh, the Nawab of Bareilly, and Nana Sáhib himself, had joined the mutinous Sepoys en masse. In this quarter of India alone, it was the revolt of a people rather than the mutiny of an army that had to be quelled. Sir Colin Campbell (afterwards Lord Clyde) conducted the by Lord campaign in Oudh, which lasted through two cold seasons <sup>3</sup> Clyde Valuable assistance was lent by Sir Jang Bahádur of Nepal, at the head of his gallant Gúrkhas. Town after town was occupied, fort after fort was stormed, until the last gun had been re-captured, and the last fugitive had been chased across the frontier by January 1859.

In the meanwhile, Sir Hugh Rose (afterwards Lord Strath-Sir Hugh mairn), with another army from Bombay, was conducting an Rose in Central brilliant campaign in Central India. His most formid India

<sup>1</sup> See article Li Chnow, The Imperial Gar tteer of India

<sup>-</sup> See article DI LIII CITY, The Imperial Garetteer of India

<sup>3</sup> See article Barrilla, The Imperial Gaz the of India

able antagonists were the disinherited Ráni or Princess of Jhánsi, and Tantiá I opí, whose military talent had previously inspired Nana Sáhib with all the capacity for resistance which he ever displayed The Princess died fighting bravely at the head of her troops in June 1858 1 Tantia Topi, after doubling backwards and forwards through Central India, was at last betrayed and run down in April 1859

**Kenewals** of the Company's Charter. 1813 15

The Company's charter had been granted from time to time for periods of twenty years, and each renewal had formed an opportunity for a national inquest into the management of The Parliamentary Inquiry of 1813 abolished the Company's monopoly of Indian trade, and compelled it to direct its energies in India to the good government of the people The Charter Act of 1833 did away with its remaining Chinese trade, and opened up administrative offices in India to the natives irrespective of caste, creed, or race of 1853 abolished the patronage by which the Company filled up the superior or covenanted branch of its civil service laid down the principle that the administration of India was too national a concern to be left to the chances of benevolent nepotism, and that England's representatives in India must be chosen openly, and without favour, from the youth of England

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Downfall of the Company, 1858

epito mized,

Act of 1784

The Mutiny sealed the fate of the East India Company. after a life of more than two and a half centuries original Company received its charter of incorporation from Elizabeth in 1600 Its political powers, and the constitution of the Indian Government, were derived from the Regulating Its history Act of 1773, passed by the Ministry of Lord North statute the Governor of Bengal was raised to the rank of 1773 1858 Governor-General, and, in conjunction with his Council of four other members, he was entrusted with the duty of superintending and controlling the Governments of Madras and Bombay, so far as regarded questions of peace and war a Supreme Court of Judicature was appointed at Calcutta, to which the judges were appointed by the Crown and a power of making rules, ordinances, and regulations was conferred upon the Governor-General and his Council Next came the India Bill of Pitt (1784), which founded the Board of Control, strengthened the supremacy of Bengal over the other Presidencies, and first authorized the historical phrase, 'Governor-General-in Council'

The new Charter Act which abolished the Company's 1 Sec article JHANSI, The Imperial Guretteer of India

Chinese trade in 1833, introduced successive reforms into the constitution of the Indian Government It added to the Act of Council a Law-member who need not be chosen from among 1833 the Company's servants, and was entitled to be present only at meetings for making Laws and Regulations It accorded the authority of Acts of Parliament to the Laws and Regulations so made, subject to the disallowance of the Court of Directors It appointed a Law Commission, and it gave the Governor-General-in-Council a control over the other Presidencies, in all points relating to the civil or military administration The Charter of the Company was renewed for the last time in 1853, not for a definite period of years, but only Act of for so long as Parliament should see fit On this occasion 1853 the number of Directors was reduced, and, as above stated. their patronage as regards appointments to the covenanted civil service was taken away, to make room for the principle of open competition

The Act for the better government of India (1858), which India finally transferred the entire administration from the Company transferred to the Crown was not passed without an all and the Company transferred to the to the Crown, was not passed without an eloquent protest from Crown, the Directors, nor without acrimonious party discussion in 1858 Parliament It enacts that India shall be governed by, and in the name of, the Queen of England through one of her principal Secretaries of State, assisted by a Council of fifteen The Governor General received the new title of 'The Viceroy The European troops of the Company, numbering Viceroy' about 24,000 officers and men, were amalgamated with the royal service, and the Indian navy was abolished Indian Councils Act (1861), the Governor-General's Council, and also the Councils at Madras and Bombay, were augmented by the addition of non-official members, either natives or Europeans, for legislative purposes only By another Act also passed in 1861, High Courts of Judicature were constituted out of the old Surreme Courts at the Presidency towns

It fell to the lot of Lord Canning both to suppress the India Mutiry, and to introduce the peaceful revolution which followed under the It suffices to say that he preserved his equanimity unruffled in 1858-62 the darkest hours of peril, and that the strict impartiality of his conduct incurred alternate praise and blame from partisans of both sides. The epithet then scornfully levelled at him of 'Clemency' Canning, is now remembered only to his honour Queen's On 1st November 1858, at a grand darbár held at Allahabad, Proclamation, 1st Nov 1858.

the Queen had assumed the government of India This document, which is, in the truest and noblest sense, the Magna Charta of the Indian people, proclaimed in eloquent words a policy of justice and religious toleration, and granted an amnesty to all except those who had directly taken part in the murder of British subjects Peace was proclaimed throughout India on the 8th July 1859 In the following cold weather, Lord Canning made a viceregal progress through the northern Provinces, to receive the homage of loyal princes and chiefs, and to guarantee to them the right of adoption

Cost of the

Financial reforms

The suppression of the Mutiny increased the debt of Indra by about 40 millions sterling, and the military changes which ensued augmented the annual expenditure by about 10 millions. To grapple with this deficit, a distinguished political economist and parliamentary financier, Mr. James Wilson, was sent out from England as financial member of Council. He reorganized the customs system, imposed an income-tax and a licence duty, and created a State paper currency. He died in the midst of his splendid task but his name still lives as that of the first and greatest finance minister of Indra. The Penal Code, originally drawn up by Macaulay in 1837, passed into law in 1860, together with Codes of Civil and Criminal Procedure in 1861.

I egyl reforms

Lord 1 'gin 1862-63 Lord Canning left India in March 1862, and died before he had been a month in Figland His successor, Lord Elgin, only lived till November 1863 He expired at the Himálayan station of Dharmsalá, and there he lies buried

I ord I awrence,

1864-69

He was succeeded by Sir John (afterwards Lord) Lawrence, the saviour of the Punjab The chief incidents of Lord Lawrence's rule were the Bhután war, followed by the annexa tion of the Bhutan Dwars in 1864, and the terrible Orissa famine of 1866

In a later famine in Bundelkhand and Upper Hindustán in 1868-69, I ord Lawrence laid down the principle, for the first time in Indian history, that the officers of the Government would be held personally responsible for taking every possible means to avert death by starvation. An inquiry was conducted into the status of the peasantry of Oudh, and an Act was passed with a view to securing them in their customary rights. After a period of fratricidal war among the sons of Dost Muhammad, the Afghán territories were concentrated in the

I vents of los Vicu rightly

<sup>1</sup> On the subject of Anglo Indian Codification, I ule ante, chap iv

hands of Sher Alf, and the latter was acknowledged as Amir by Lord Lawrence A commercial crisis took place in 1866, which seriously threatened the young tea industry in Bengal, and caused widespread ruin in Bombay Sir John Lawrence retired in January 1869, after having passed through every grade of Indian service, from an assistant magistracy to the On his return to England, he was raised to the peerage. He died in 1879, and lies in Westminster Abbey

Lord Mayo succeeded Lord Lawrence in 1869, and urged Lord on the material progress of India. The Ambalá darbár, Mayo, 1869-72 at which Sher Ali was recognised as Amir of Afghanistan, Ambala although in one sense the completion of what Lord Lawrence darbar, had begun, owed its success to Lord Mayo The visit of 1869 His Royal Highness the Duke of Edinburgh in 1869-70 gave great pleasure to the natives of India, and introduced a tone of personal loyalty into our relations with the feudatory princes

Lord Mayo reformed several of the great branches of Lord the administration, created an Agricultural Department, and Major reforms introduced the system of Provincial Finance The impulse to Provincial local self-government given by the last measure has done finance much, and will do more, to develop and husband the revenues of India, to quicken the sense of responsibility among the English administrators, and to awaken political life among the people Lord Mayo also laid the foundation for the reform of the Salt Duties He thus enabled his successors to abolish Customs the old pernicious customs-lines which walled off Province lines from Province, and strangled the trade between British India and the Feudatory States He developed the material resources of the country by an immense extension of roads, railways, and canals, thus carrying out the beneficent system of Public Works which Lord Dalhousie had inaugurated Lord Mayo's splendid vigour defied alike the climate and the vast tasks which he imposed on himself He anxiously and laboriously studied with his own eyes the wants of the farthest Provinces of the Empire But his life of noble usefulness was Lord cut short by the hand of an assassin, in the convict settlement Mayo's death, of the Andaman Islands, in 1872 1872

His successor was Lord Northbrook, whose ability found Lord pre eminent scope in the department of finance 1 During his brook,

<sup>1</sup> It would be unsuitable for an officer of the Government to attempt 1872-76 anything beyond the barest summary or events in India since the death of

viceroyalty, a famine which threatened Lower Bengal in 1874 was successfully obviated by a vast organization of State relief, the Marátha Gáekwár of Baroda was dethroned in 1875 for misgovernment and disloyalty, but his dominions were continued to a child selected from the family, and the Prince of Wales made a tour through the country in the cold weather of 1875-76 The presence of His Royal Highness evoked a passionate burst of loyalty never before known in the annals of British India. The feudatory chiefs and ruling houses of India felt for the first time that they were incorporated into the Empire of an ancient and a splendid dynasty

Prince of Wales tour, 1875 1876

Lord I vtton, 1876-60 The '1 mpress of India

1877-78

Lord Lytton followed Lord Northbrook in 1876 On January 1, 1877, Queen Victoria was proclaimed Empress of India at a darbar of unparalleled magnificence, held in the old Delhi cantonment behind the historic 'ridge'—the 'ridge' from which in 1857 the British had reconquered the revolted Mughal capital But while the princes and high officials of the country were flocking to this gorgeous scene the shadow of famine was darkening over Southern India Both the monsoons of 1876 had fulled to bring their due supply of rain, and the season of 1877 was little Famme of better This long-continued drought stretched from the Deccan to Cape Comorin, and subsequently invaded Northern India, causing a famine more widespread than any similar calamity Despite vast importations of grain by sea and since 1770 rail, despite the most strenuous exertions of the Government, which incurred a total expenditure on this account of 11 millions sterling, the loss of life from actual starvation and its attendant train of diseases was lamentable The deaths from want of food, and from the diseases incident to a faminestricken population, were estimated at 51 millions

A'ghan าเก็กกร 18 8761

In the autumn of 1878, the affairs of Afghánistan again forced themselves into notice Sher Ali, the Amír, who had been hospitably entertained by Lord Mayo, was found to be favouring Russian intrigues A British embassy was refused admittance to the country, while a Russian mission was received with honour This led to a declaration of war British armies advanced by three routes - the Khaibar (Khyber), the Kuram, and the Bolán, and without much opposition occupied the inner entrances of the passes

I ord Mayo in 1872 The four Vicer by who have ruled during the past four teen years, are, happily, still living, then policy forms the subject of keen concemporary criticism, and the administrators, soldiers, and diplomatists who gave effect to that policy still hold possession of the scene

Alí fled to Afghán Turkistan, and there died A treaty was entered into with his son, Yakub Khán, at Gandamak, by which the British frontier was advanced to the crests or farther sides of the passes, and a British officer was admitted to reside at Kabul. Within a few months the British Resident, Sir Louis Cavagnari, was treacherously attacked and massacred together with his escort, and a second war became Yakub Khán abdicated, and was deported to necessarv India

At this crisis of affairs, a general election in England resulted in a defeat of the Conservative Ministry Lord Lytton resigned simultaneously with the Home Government, and the Marquis of Ripon was nominated as his successor in April Marquis of In that year, a British brigade received a defeat Ripon, between Kandahar and the Helmand river from the Herát troops of Ayub Khán, a defeat promptly and completely retrieved by the brilliant march of General Sir Frederick Roberts from Kábul to Kandahár, and by the total rout of Ayub Khán's army on 1st September 1880 Abdurrahman Khán, the eldest male representative of the stock of Dost Muhammad, was recognised by us as Amir The British forces Afghan retued from K4bul, leaving him, as our friend, in possession affairs, 1880-84 of the capital 

The withdrawal of our troops from Kandahar was also effected Soon afterwards Ayúb Khan advanced with an army from Herat, defeated the Amir Abdurrahman's troops, and captured Kandahár His success was short-lived The Amir Abdurrahman marched south with his forces from Kabul, completely routed Ayúb Khan, re occupied Kandahár, and still reigns as undisputed Amir of Afghánistan (1886) In 1884, 7 Boundary Commission was appointed with the consent of the Amir to settle, in conjunction with Russian Commissioners, the north-western frontier of Afghanistan

The Native State of Mysore, which had been administered Mysore, by the British on behalf of the Hindu ruling family since 1831, 1881 was replaced under its hereditary dynasty on the 25th March 188r

During the remaining years of Lord Ripon's administration Lord (1881-84) peace was maintained in India The Viceroy took Ripon's internal advantage of this lull to carry out certain important reforms in adminis the internal government of the country The years 1882-84 tration, By the repeal of 1881-84 will be memorable for these great measures the Vernacular Press Act, he set free the native journals from the last restraints on the free discussion of public questions

Local (rovern men. Acts His scheme of local self government developed the municipal institutions which had been growing up since India passed to the Crown—By a series of enactments larger powers of local self government were given to rural and urban boards, and the elective principle received a wider application—Where rural boards did not exist, he endeavoured to utilize the local materials available for their formation, and from this point of view he may be said to have extended the principle of local self-government from the towns to the country—Where rural boards already existed he increased their powers, and as far as possible sought to give them a representative basis

Amend ment of Cumunal Procedure An attempt to extend the jurisdiction of the rural criminal courts over European British subjects, independently of the race or nationality of the presiding judge, excited strong public feeling, and ended in a comprom se. The principle was asserted in regard to native officers belonging to the Superior Civil Service who had attained to a certain standing, namely District Magistrates and Sessions Judges. At the same time the Furopean community received a further extension of trial by jury which enables European British subjects to claim a jury, if they see fit to do so, in nearly all cases before the District criminal tribunals

One of the earliest acts of Lord Ripon's viceroyalty was the

Deparment of Agriculture 1551-84.

re-establishment of the Department of Revenue and Agriculture in accordance with the recommendation of the Famine Com-This department had been originally instituted by Lord Mayo, but some years after his death, its functions had been distributed between the Finance and Home Departments It was now reconstituted substantially on its former basis, as a distinct secretariat of the Government of India It at once took up the recommendations of the Famine Commission, both those bearing on famine relief, and those dealing with organic reforms in the administration of the land revenue cultural improvements, exhibitions of Indian produce, whether in India or in Europe, and works elucidating the raw produce of the country, received its special attention. Its reforms in the administration of the land revenue were largely directed to prevent re-settlements in temporarily settled districts from bearing too heavily on the cultivators. Such re-settlements arc in future, except in special cases, to avoid re measurement and vexatious inquisitions, and are to leave to the landlord or husbandman the entire profits accruing from improvements

Levenue refamis

carried out by himself

Henceforth, an enhancement of the land revenue is to be

made mainly on the grounds (1) of a rise in prices, (2) of an increase in the cultivated area, and (3) of improvements which have been made at the expense of the Government Agricultural Department superintends a variety of important operations bearing on the development of the country and the welfare of the people, including surveys, emigration, the meteorological bureau, the extension of veterinary science, and the statistics of internal trade

Lord Ripon also appointed an Education Commission with Education a view to the spread of popular instruction on a broader basis Commis This Commission, after hearing evidence and collecting data 1883 throughout the Presidencies and Provinces of India, reported in 1883 The result of its labours was a Resolution of the Governor-General in Council, which, while encouraging all grades of education, provided specially for the advance of primary instruction at a more equal pace with higher education The Recommendations of the Commission, and the Government Resolution based upon them, gave encouragement to the indigenous schools which in some Provinces had not previously received a sufficient recognition from the State Department of Public Instruction

The Commission's Recommendations strongly affirmed the principle of self help in the extension of high schools and colleges and laid particular stress on the duty of assisting primary education from Provincial and Municipal funds They endeavoured to provide for certain sections of the people, particularly the Muhammadans, who for various causes had found themselves unable to avail themselves fully of the State system of public instruction, or in regard to whom that system had proved defective. The general effect of the Commission's labours, and of the Government Resolution based thereon, is to give a more liberal recognition to private effort of every kind, and to schools and colleges conducted on the system of grants in aid

In 1882, Lord Ripon's Finance Minister, Sir Evelyn Abolition Baring, took off the import duties on cotton goods, and of customs with them, almost the whole import customs, saving a few 1882, exceptions such as those on arms, liquors, etc, were abolished In 1884, a Committee of the House of Commons took evidence on railway extension in India, and embodied their recommendations in a Parliamentary Report The condition of the agricultural population in Bengal occupied the close attention of Lord Ripon throughout his whole viceroyalty After keen Bengal discussions, prolonged during many years, he left a Tenancy Bill

Bill, regulating the relations of landlord and tenant in Bengal, almost ready to be passed by his successor

Earl of Dufferin, 1884 The Marquis of Ripon retired from the viceroyalty at the end of 1884, and was succeeded by the Earl of Dufferin In the spring of 1885, Lord Dufferin passed the Bengal Tenancy Bill through its final stage in the Legislature, and held a Darbar at Rawal Pindi for the reception of the Amír of Afghanistán The result of the meeting was to strengthen the British relations with that ruler

Burmese affairs, 1885

During the summer of the same year, 1885, the hostile attitude of the king of Independent Burma forced itself upon the attention of the British Government After repeated but fruitless remonstrances, a British expedition was despatched from Bengal and Madras to Rangoon It advanced up the Irawadı valley (November-December 1885), and occupied Mandalay, the capital of Independent Burma King Thebau, who had inaugurated his reign by a family massacre, and had steadily refused to redress the wrongs of certain British subjects whom he had injured, remained defiant He vainly sought aid against the English from foreign powers In the end he surrendered, almost without a blow, was dethroned, and deported for safe custody to British India I he authority of the Viceroy of India was substituted for that of King Thebau throughout Upper Burma by Proclamation on the 1st In February 1886, I ord Dufferin proceeded Tanuary 1886 in person to Burma, to settle the administration of the new As all pacific proposals were rejected, a British Province military force under General Prendergast moved up the Irawadi The opposition encountered was in a flotilla of steamers insignificant On November 28 the capital of Mandalay was occupied without fighting, King Thebru suirendered, and was sent as a prisoner to Ringoon

## CHAPTER XVI

## BRITISH ADMINISTRATION OF INDIA

The Act of 1858, which transferred India from the Company Control of to the Crown, also laid down the scheme of its government India in Fingland Under the Company, the Governor General was an autocrat, Under the responsible only to the distant Court of Directors. The Company Court of Directors had been answerable to the shareholders, or Court of I'roprietors, on the one hand, and, through the Board of Control, to the Sovereign and to Parliament on the other. The Act of 1858 did away with these intermediary Under the bodies between the Governor General and the British Ministry. Crown For the Court of Directors, the Court of Proprietors, and the Board of Control it substituted a Secretary of State, aided by a Council appointed by the Crown

The Secretary of State for India is a Cabinet Minister, who The Secretary of State out of office with the other members of State the Ministry. His Council was originally appointed for life. His Its members are now appointed for ten years only, but may Council in England be re appointed for another five years for special reasons. The Secretary of State rules in all ordinary matters through the majority of his Council. But in affairs of urgency, and in questions which belong to the Secret Department, including political correspondence, he is not required to consult his Council. The Viceroy or Governor-General is appointed by Office of the Crown, and resides in India. His ordinary term of Viceroy office is five years.

The supreme authority in India is vested by a series of Acts Admini of Parliament <sup>3</sup> in the Viceroy or Governor-General-in Council, stration subject to the control of the Secretary of State in England Every executive order and every legislative statute runs Governor in the name of the 'Governor General-in-Council, <sup>3</sup> but in General in-Council

<sup>1</sup> Under 32 and 33 Vict c 97

<sup>\*</sup> The chief of these Acts are 13 Geo III c 63, 33 Geo III c 52 3 and 4 Will IV c 85, 21 and 22 Vict c 106, and 24 and 25 Vict c 62

A style first authorized by 33 Geo III c 52, sec 39

certain cases,1 a power is reserved to the Viceroy to act independently The Governor-General's Council is of a twofold character

I vecutive Council

First, the ordinary or Executive Council,2 usually composed of about six official members besides the Viceroy, which may be compared with the cabinet of a constitutional country meets regularly at short intervals, usually once a week, discusses and decides upon questions of foreign policy and domestic administration, and prepares measures for the Legislative Council Its members divide among themselves the chief departments of State, such as those of Foreign Affairs, Finance, War, Public Works, etc. The Viceroy combines in his own person the duties of constitutional Sovereign with those of Prime Minister, and has usually charge of the Foreign Department As a rule, the Viceroy is himself the initiating Member of Council for Foreign and Feudatory Affairs

the same members as the preceding, with the addition of the Governor of the Province 11 which it may be held, certain officials selected by the Governor General from Bengal, Madras, Bombay, or other Provinces and nominated mem pers, representative of the non-official Native and Luropean communicies. The official additional members thus appointed Legislative to the Legislative Council must not exceed in number the nonofficials and the total of the additional members must not exceed twelve. The meetings of the Legislative Council are held when and as required, usually once a week open to the public, and a further guarantee for publicity is ensured by the proviso that draft Bills must be published a

Second, the Legislative Council, which is made up of

Council

- 1 'Cases of high importance, and essentially affecting the public interest and welfare (33 Geo 111 c 52, sec 47), 'when any measure is proposed whereby the safety, tranquillity, or interests of the British possessions in In ha may, in the judgment of the Governor General, be essentially affected (3 and 4 Will IV c 85, sec 49), 'cases of emergency' (24 and 25 Vict c 67, sec 23)
- 4 this is the lineal descendant of the original Council organized under the charters of the Company, first constituted by Parliamentary sanction in 1773 (13 Geo 111 c. 63, sec 7)
- 3 The mechanism and working of the Governor General's Council, and of the Secretariats, and chief Departments of the Indian Administration, are described in Hunter's I ife of the Earl of Mayo, vol 1 pp 189-202 (2nd ed )
- Originally identical with the Lxecutive Council, upon which legislative powers were conferred by 13 Geo III c 63, sec 36 The distinction between the two Councils was first recognised in the appointment of 'the fourth member' (3 and 4 Will II c 85, sec 40)

certain number of times in the Gazette As a matter of practice, these draft Bills have usually been first subjected to the criticism of the several Provincial governments Provincial Legislative Councils have also been appointed for the Presidencies of Madras and Bombay, and for the Lieutenant-Governorship of Bengal The members of these local Legislative Councils are appointed, in the case of Madras and Bombay, by the Governors of those Provinces, and in Bengal, by the Lieutenant-Governor, subject to the approval of the Governor-General The Acts of these Provincial Legislative Councils, which can deal only with provincial matters, are subject to sanction by the Governor-General

The Presidencies of Madras and Bombay, and the Lieutenant-High Governorships of Bengal and of the North-Western Provinces, Justice, have each a High Court, supreme both in civil and criminal business, but with an ultimate appeal to the Judicial Committee of the Privy Council in England Of the minor Provinces. the Punjab has a Chief Court, with three judges, the Central Provinces and Oudh have each a Judicial Com missioner, who sits alone British Burma has a Judicial Commissioner and a Recorder In this Province, the Judicial Commissioner has jurisdiction over the territory outside Rangoon (save that in cases of European British subjects the Recorder has the powers of a High Court) The Recorder has jurisdiction in the town of Rangoon, and in all criminal cases in any part of Burma where the accused are European British subjects The Judicial Commissioner and the Recorder of Rangoon sit together as a 'Special Court' for certain purposes Appeals from the Recorder of Rangoon in civil suits where the subject-matter ranges from Rs 3000 to Rs. 10,000, lie to the High Court at Calcutta The latter Court also decides references from the 'Special Court' of Rangoon when the members are equally divided in opinion For Assam, the High Court at Calcutta is the highest judicial authority, except in the three Hill Districts, namely, the Gáro Hills, the Khasi and Jaintia Hills, and the Nága Hills In these Districts. the Chief Commissioner of Assam is judge without appeal in civil and criminal matters. Special rules apply to the Dwars bordering on Bhután

The law administered in the Indian Courts consists mainly The law of—(1) the enactments of the Indian Legislative Councils of British India (Imperial and Provincial), as above described, and of the bodies

VOL VI

<sup>1</sup> Constituted out of the Supreme Courts and the Sudder (Sadr) Courts in 1861 (24 and 25 Vict c 104)

which preceded them, (2) statutes of the British Parliament which apply to India, (3) the Hindu and Muhammadan laws of inheritance, and their domestic law, in causes affecting Hindus and Muhammadans, (4) the Customary Law affecting particular castes and races. Much has been done towards consolidating special sections of the Indian law, 1 and in the Indian Penal Code, together with the Codes of Civil and Criminal Procedure, we have memorable examples of such efforts

But although the Governor-General-in-Council is theoretically

Province Admini stration

Madras

Bombay

supreme over every part of India alike,2 his actual authority is not everywhere exercised in the same direct manner ordinary purposes of administration, British India is partitioned into Provinces, each with a government of its own, and certain of the Native States are attached to those Provinces with which they are most nearly connected geographically These Provinces, again, enjoy various degrees of independence. The two Presidencies of Madras and Bombay, including Sind, retain many marks of their original equality with Bengal have an army and a civil service of their own They are each administered by a Governor appointed direct from England They have each an Executive and a Legislative Council, whose functions are analogous to those of the Councils of the Governor-General, although subject to his control 3 They thus possess a domestic legislature, and in administrative matters, also, the interference of the Governor-General-in Council is sparingly

Beng 1

exercised

Of the other Provinces, Bengal, or ruther I ower Bengal, occupies a peculiar position. Like the North-Western Provinces and the Punjab, it is administered by a single official with the style of Lieutenant-Governor, who is controlled by no Executive Council, but, unlike those two Provinces, Bengal has a Legislative Council, so far preserving a sign of its early preeminence. The other Northern Provinces, Assam, Oudh, and the Central Provinces, whether ruled by a Lieutenant-Governor or a Chief Commissioner, may be regarded from a historical point of view as fragments of the original Bengal Presidency, which, as thus defined, would be co-extensive with all British India not included under Madras or Bombay. Garrisons on the Madras or Bombay establishment may be posted in out-

Provinces

Minor

<sup>1</sup> Ante, chap iv p 117

<sup>2 3</sup> and 4 Will IV c. 85, secs 39 and 65

<sup>3 24</sup> and 25 Vict c 67, sec 42

<sup>\*</sup> See article BENGAL PRESIDENCY, The Imperial Gaucticer of Inaia

lying tracts of the old Bengal territories, but civil officers of the Madras and Bombay Services are excluded The Lieutenant-Governors and most of the Chief Commissioners are chosen from the Covenanted Civil Service In executive matters they are the practical rulers, but, excepting the Lieutenant-Governor of Bengal, they have no legislative authority

To complete the total area of territory under British admini-Minor stration, it is necessary to mention, besides Bengal, the North-strations Western Provinces, the Punjab, Oudh, and Assam, certain quasi-Provinces, under the immediate control of the Vicerov These are—British Burma, part of which was annexed in 1826 and part in 1852, the CENTRAL PROVINCES, lapsed in 1853, Assam, annexed in 1826, AJMERE, transferred from Rajputána, BERAR, or the Districts assigned by the Nizám of Haidarabad, for the support of the Haidarabad Contingent, and the little territory of Coorg, in the extreme south 1 The State of Mysore was under British administration from 1831 to 1881, when it was restored to its native Rajá, on his attaining his majority

Another difference of administration, although now of less 'The importance than in former times, derives its name from the Regula old Regulations, or laws and judicial rules of practice which preceded the present system of Acts of the Legislature From these Regulations certain tracts of country have been from time to time exempted-tracts which, owing to their backward state of civilisation or other causes, seemed to require exceptional treatment In non-Regulation territory, broadly speak- Non ing, a larger measure of discretion is allowed to the officials, Regulation territory both in the collection of revenue and in the administration of civil justice, strict rules of procedure yield to the local exigencies, and the judicial and executive departments are to a great extent combined in the same hands

A wider field is also permitted for the selection of the administrative body, which is not entirely confined to the Covenanted Civil Service, but includes military officers on the staff and also uncovenanted civilians The title of the highest executive official in a District of a Regulation Province is that of Collector-Magistrate In a non-Regulation District, the 'Deputy corresponding officer is styled the Deputy Commissioner, and Commissioners the supreme authority in a non-Regulation Province (with the exception of the Punjab) is called, not a Lieutenant-Governor, but a Chief Commissioner The Central Provinces, Assam,

<sup>1</sup> For the constitution of each of these Provinces, see their articles in The Imperial Gasetteer of India

and British Burma are examples of non Regulation Provinces, but non-Regulation Districts are to be found also in Bengal and the North-Western Provinces Their existence is always disclosed by the term 'Deputy Commissioner' as the title of the chief executive officer of the District

The District or territorial unit

Alike in Regulation and in non-Regulation territory, the unit of administration is the District—a word of very definite meaning in official phraseology The District officer, whether known as Collector-Magistrate or as Deputy Commissioner, is the responsible head of his jurisdiction. Upon his energy and personal character depends ultimately the efficiency of our Indian Government His own special duties are so numerous and so various as to bewilder the outsider, and the work of his subordinates, European and native, largely depends upon the stimulus of his personal example position has been compared to that of the French préfet, but such a comparison is unjust in many ways to the Indian He is not a mere subordinate of a central District officer bureau, who takes his colour from his chief, and represents the political parties or the permanent officialism of the capital The Indian Collector is a strongly individualized worker in every department of rural well-being, with a large measure of local independence and of individual initiative

The District Officer or 'Collector Magis' trate'

Du its of the 'Collector-Vigis trate

As the name of Collector-Magistrate implies, his main functions are two-fold. He is a fiscal officer, charged with the collection of the revenue from the land and other sources, he also is a revenue and criminal judge, both of first instance and in appeal. But his title by no means exhausts his multifarious duties. He does in his smaller local sphere all that the Home Secretary superintends in England, and a great deal more, for he is the representative of a paternal and not of a constitu tional government Police, jails, education, municipalities, roads, sanitation, dispensiones, the local taxation, and the imperial revenues of his District, are to him matters of daily He is expected to make himself acquainted with every phase of the social life of the natives, and 'with each natural aspect of the country He should be a lawyer, an accountant, a surveyor, and a ready writer of State papers He ought also to possess no mean knowledge of agriculture, political economy, and engineering

Number of The total number of Districts in British India is about 235
Districts in They vary greatly in size and number of inhabitants The British average area is 3840 square miles, ranging from 14,115 square

miles in Sind (Karáchi), 12,045 square miles in Bengal (Lohardaga), and 11,885 square miles in the Central Provinces (Raipur), down to 937 square miles in the North-Western Provinces (Tarai), 957 square miles in Madras (Nílgiris), and 989 square miles in Oudh (Lucknow) The average population is 800,723 souls, similarly ranging from 3,051,016 in Bengal (Maimansingh), 2,617,120 in the North-Western Provinces Their (Gorakhpur), and 2,365,035 in Madras (Malabar), down to varying 91,034 in Madras (Nilgiris), 144,070 in the North-Western Provinces (Dehra), and to 231,341 in the Central Provinces Districts from their extreme smallness, or other circumstances which render them quite exceptional,—such as the little hill District of Simila, the backward and only partially inhabited tract of Northern Arakan, the Calcutta Suburban District of Howrah,—are not included in the above The Madras Districts are, on an average, the most extensive in area, and the most populous In every other Province but Madras, the Districts are grouped into larger areas, known as Divisions, each under the charge of a Commissioner But these Divisions are not properly units of administration, as the Districts are. They are aggregates of units, formed only for convenience of supervision, so that an intermediate authority may exercise the universal watchfulness which would be impossible for a distant Lieutenant-Governor

The Districts are again partitioned out into lesser tracts, Subcalled Sub-divisions in Bengal, táluks in Madras and in Districts Bombay, and tahsils in Northern India generally. These Sub-Districts are the primary units of fiscal administration. The tháná, or police circle, is the unit of police administration over the whole of British India.

The preceding sketch of Indian administration would be The Secre incomplete without a reference to the Secretariat, or central tariat bureau of each Province, which controls and gives unity to the whole. From the Secretariat are issued the orders that regulate or modify the details of administration, into the Secretariat come the multifarious reports from the local officers, to be there digested for future reference. But although the Secretaries may enjoy the social life of the Presidency capitals, with higher salaries and better prospects of promotion, the efficiency of our rule rests ultimately upon the shoulders of the District officers, who bear the burden and heat of the day, of the with fewer opportunities of winning fame or reward. The Government of Secretariat of the Supreme Government of India consists of India,

seven branches, each of which deals with a special department of the administration The officers who preside over them are named respectively, the Foreign Secretary, the Home Secretary, the Secretary in the Department of Revenue and Agriculture, the Financial Secretary, the Military Secretary, the Public Works Secretary, and the Secretary in the Legislative Department In the Presidencies, Lieutenant-Governorships, and Chief-Commissionerships the Provincial Secretariat is formed on the same model, but the Secretaries are only from one to three or four in number

of the local govern ment

Land Tax

Land Settle-

men

THE LAND TAX —The land furnishes the chief source of Indian revenue, and the collection of the land tax forms the main work of Indian administration No technical term is more familiar to Anglo-Indians, and none more obscure to the English public, than that of 'land settlement' Nor has any subject given rise to more voluminous controversy here suffice to explain the general principles upon which the system is based, and to indicate the chief differences in their application to the several Provinces That the State should appropriate to itself a share of the produce of the soil, is a maxim of finance which has been recognised throughout the East from time immemorial The germs of rival systems in India can be traced in the survival of military and other service tenures, and in the poll-tax of Assam and Burma

Ancient land system. of India.

The early development of the Indian land system was due to two conditions,—a comparatively high state of agriculture, and an organized plan of administration,-both of which were supplied by the primitive Hindu village community the lapse of generations, despite domestic anarchy and foreign conquest, the Hindu village preserved its customs, written or the imperishable tablets of tradition. In the ancient Hindu village community, the land was held, not by private owners, but by occupiers under the village corporation the revenue was due, not from individuals, but from the village community represented by its head-man. The harvest of the hamlet was dealt with as a common fund, and before the general distri bution, the head-man was bound to set aside the share of the No other system of taxation could be theoretically more just, or in practice less obnoxious, to a primitive people ancient land system may still be found in parts of India, both under British and native rule, and it prevailed almost universally before the Muhammadan conquest

The Musalmans brought with them the avarice of co iquerors,

and a stringent system of revenue collection Under the Musulman Mughal Empire, as organized by Akbar the Great, the share land tax of the State was fixed at one-third of the gross produce of the soil, and an army of tax collectors intervened between the cultivator and the supreme government. The vocabulary of our own land system is borrowed from the Mughal The zamindar himself is a creation of the The administration Muhammadans, unknown to the early Hindu system was originally a mere tax collector, or farmer of the land revenue, who agreed to pay a lump sum from the tract of country assigned to him But the Hindu chief or local mag- His two nate was often accepted by the Mughals as the zamındár, or fold origin revenue contractor, for the lands under his control way, the Indian zamindars as a body are of mixed origin, and represent in some cases not merely an official status, but hereditary rights If the Hindu village system may be praised for its justice, the Mughal farming system had at least the ment of efficiency Shah Jahán and Aurangzeb, as we have seen,1 extracted a larger land revenue than we obtain at the present day

When the responsibility of governing the country was first The Com undertaken by the East India Company, an attempt was made pany's to understand the social system upon which the payment of efforts land revenue was based Elaborate orders were issued to this end in 1769, but the Company's servants were too engrossed with conquest, with the 'annual investment,' and with their private trade, to find time for minute inquiries into the rights of the peasantry The zamındar was conspicuous and useful, The the village community and the cultivating ráyat did not force ramindar made themselves into notice The zamindar seemed a solvent landloid person, capable of keeping a contract, and his official position as tax collector was confused with the proprietary rights of an English landlord In Bengal, the samindar, under the Per manent Settlement of 1793, was raised to the status of proprietor, holding at a quit-rent payable to the State, fixed in perpetuity In Madras, under the ráyatwári system of holding direct from the State, and in most other parts of India, the actual cultivator has been raised to the same status, subject also to a quit rent, fixed at intervals of thirty years The aim of Growth of the British authorities has everywhere been to establish private private rights property in the soil, consistently with the punctual payment of the revenue

The annual Government demand, like the succession duty in

<sup>1</sup> This subject has been fully discussed in the chapter on the Mughal 1 mpire Vide ante, pp 298, 299, 305, 311, etc

Landed property in India

England, is the first liability on the land. When that is satisfied, the registered landholder in Bengal has powers of sale or mortgage scarcely more restricted than those of an English tenant in fee-simple At the same time, the possible hardships, as regards the cultivator, of this absolute right of property vested in the owner have been anticipated by the recognition of occupancy rights or fixity of peasant-tenures, under carefully ascertained conditions

Individual lights

Legal titles have everywhere taken the place of unwritten proprietary customs Land, which was merely a source of livelihood to the cultivator and of revenue to the State, has become a valuable property to the owner The fixing of the revenue demand has conferred upon the landholder a credit which he never before possessed, and created for him a source of future profit arising out of the unearned increment. This credit he may use improvidently, and he sometimes does so with disastrous results But none the less has the land system of India been raised from a lower to a higher stage of civilisation, that is to say, from holdings in common to holdings in severalty, and from the corporate possession of the village community to individual proprietary rights

Kives of land tax

With regard to the money rates of the assessment, the Famine Commissioners in 1880 reported the average rate throughout India at about 2s per cultivated acre, ranging from 4d to 4s 6d, according to the quality of the land In the North-Western Provinces the rates of assessment average Rs 1 11 4 per cultivated acre In the Punjab, with the same system of Land Settlement, but with an inferior soil, they average just under one rupee. These latter figures are taken from the Census Report of 1881 Taking the nominal conversion of the rupee at 2s, the average rate in the North-Western Provinces would be 3s. 5d., and in the Punjab a fraction under The rupee, however, is now (1885) worth, at the 2s, per acre current rate of exchange, only 1s. 6d, and not 2s sterling land-tax would therefore be about 25, 7d. in the North-Western Provinces, and is 6d in the Punjab, per acre

ment share of the rop

The actual share of the crop, represented by these rates, is a very difficult problem. The Mughal assessment was fixed at one-third of the produce Under many native rulers, this rate was increased to one-half, and under some to three-fifths for example, the author found that in Parikud the Rájá's officers used to take 48ths of the crop on the threshing floor, leaving only two fifths to the cultivator 1

<sup>1</sup> See Hunter's Orissa, vol 1 p 34 (ed 1872)

The English revenue officers adhere to the old theory of a third of the produce, but they make so many deductions in favour of the peasant, as to reduce the Government share in practice to about one-seventeenth. This question will be discussed in some detail in dealing with the general comparison of English and Mughal taxation It must here suffice to say that the Famine Commissioners, the only body who have had the whole evidence before them, estimate the land-tax throughout British India 'at from 3 per cent to 7 per cent of the gross out-turn' The old native basis of division, although retained in name in some Provinces, has disappeared in practice Instead of the ruling power taking from 33 to 60 per cent, the average land-tax of the British Government throughout India is, according to the Famine Commissioners, only 51 per cent of the produce of the fields

The means by which the land revenue is assessed is known The Land as Settlement, and the assessor is styled a Settlement Officer Settle In Lower Bengal, the assessment existing in 1793 was declared to be fixed in perpetuity, but throughout the greater part of India the process is ever going on The details vary in the different Provinces, but, broadly speaking, a Settlement may be described as the ascertainment of the agricultural capacity of the land Prior to the Settlement is the work of Village V Survey, which determines the area of every village, and, Survey as a rule, of every field Then comes the Settlement Officer, whose duty it is to estimate the character of the soil, the kind of crop, the opportunities for irrigation, the present means of communication, their probable development, and all other circumstances which tend to affect the value of the land and its Process produce With these facts before him, he proceeds to assess of Settle the Government demand upon the land, according to certain general principles, which may vary in the several Provinces The final result is a Settlement Report, which records, as in a Domesday Book, the whole agricultural statistics concerning the District

lower Bengal, and a few adjoining Districts of the North-The Per-Western Provinces and of Madras, enjoy a Permanent Settle-Settlement ment, te the land revenue has been fixed in perpetuity When of Bengal the Company obtained the diwini or financial administration of Bengal in 1765, the theory of a Settlement, as described above, was unknown The existing Muhammadan system was Our first adopted in its entirety Engagements, sometimes yearly, some attempts, times for a term of years, were entered into with the zamindars

to pay a lump sum for the area over which they exercised control If the offer of the zamindár was not deemed satisfactory. another contractor was substituted in his place were taken, and perhaps no steps were then possible, to ascertain in detail the amount which the country could afford to pay For more than twenty years this practice of temporary engagements continued, and received the sanction of Warren Hastings, the first Governor-General of India great rival, Francis, was among those who urged the superior Permanent advantages of a permanent assessment At last, in 1789, a slightly more accurate investigation into the agricultural resources of Bengal was carned out, and the Settlement based upon the imperfect data yielded by this inquiry was declared perpetual by Lord Cornwallis in 1793 1

ment, 1793

Propue by law

Fixel land tax of Lower bengal, 1793

The samindars were thus raised to the status of landlords, torscreated with rights of transfer and inheritance, subject only to the payment in perpetuity of a rent charge. In default of due payment, their lands were to be sold to the highest bidder The assessment of Lower Bengal was fixed at sillá Rs. 26,800,089, equivalent to Rs 28,587,722, then about equal to three By the year 1871-72, the total land-tax millions sterling realized from the same area had increased to over 31 millions sterling, chiefly owing to the inclusion of estates which had escaped the original assessment on various pretexts 1883-84, the land revenue of Bengal was returned at 34 millions sterling, apart from the road and local cesses based on the land-tax. If these are added, the total exceeds 4 millions sterling, popularly lumped together as 'land revenue'

While the claim of Government against the zaminduis was thus fixed for ever, the law intended that the rights of the zamindárs over their own tenants should equitably be But no detailed record of tenant right was inserted in the Settlement papers, and as a matter of fact, the cultivators lost rather than gained in security of tenure. The rights of the landlord, as against the State, were defined by the Regulations of 1703, and the rights of the tenants, as against the landlord, were formerly 'reserved' by those Regulations, but were not defined. The landlord could therefore go into Court with a precise legal status, the cultivator could only shelter himself under vague customary rights. As the pressure of population on the soil increased, and land in Bengal became

Rights of the cilu vato 5

> 1 The personal aspects of this measure, and the parts played by the Court of Directors, the Governor General (Lord Cornwallis), and his chief Indian adviser (John Shore), are briefly narrated, ante, p 393

a subject of competition among the cultivators, the tenant found himself unprovided with any legal provisions to enable him to resist rack rents He could only plead ancient but undefined custom the landlord could urge a proprietary right. based on express sections of the law The result was a gradual decadence of peasant-right during the sixty-five years following the Permanent Settlement of 1793

The zamindár was the revenue-paying unit recognised by the Permanent Settlement But in a large number of cases the zamindar has in effect parted with all his interest in the land, by means of the creation of perpetual leases or patnis These leases are usually granted in consideration of a lump Inter sum paid down and an annual rent The fatnudár may in mediate tenure turn create an indefinite series of sub tenures, such as dar holders patnis, se patnis, etc., beneath his own tenure, and between himself and the actual cultivator

It has been mentioned that the Permanent Settlement of 1793 was not preceded by any systematic survey But in the course of the past thirty years, Lower Bengal has been subjected to a professional survey, which determined the boundaries of Imperfect every village, and issued maps on the scale of four inches to survey of Bengal This survey, however, has only a topographical value Few statistical inquiries were made, and no record obtained of rights in the soil Even the village landmarks then set up have been suffered to fall into decay. It was not until 1869 that a Statistical Survey of Bergal was, after several Statistical costly failures dating as far pack as 1769 and 1807, organized Survey on an efficient basis The work was conducted to a successful issue during the ten following years (1869 to 1879), and the results of the survey were published in twenty two volumes, containing a systematic account of each of the sixty Districts of Bengal and Assam, with their 74 millions of people

By two stringent Regulations in 1799 and 1812, the tenant Cultivators If he oppressed, was placed at the mercy of a rack-renting landlord failed to pay his rent, however excessive, his property was rendered hable to distraint, and his person to imprisonment At the same time, the operation of the revenue sale law had introduced a new race of zamindárs, who were bound to their tenants by no traditions of hereditary sympathy, but whose sole object was to make a profit out of their newly-purchased property The rack-rented peasantry found little protection in our courts until 1859, when an Act was passed which con- Land Law siderably restricted the landlord's powers of enhancement in of 1859

certain specified cases

Land reform of 1859

The Land Law of 1859 divided the cultivators into four classes -First, those who had held their holdings at the same It ordained that the rents of such tenants rates since 1703 should not be raised at all Second, those who had held their land at the same rent for twenty years It ordained that such tenants should be presumed by law to have held since 1703, unless the contrary was proved Third, those who had held for twelve years To such tenants it gave a right of occupancy, under which their rents could be raised only for certain specified reasons by a suit at law Fourth, those who had held for less than twelve years These were left by Act x of 1859 to make what bargain they could with the landlords

Subsequent rise in rent

mission, 1879

Its proposals, 1880

Further experience, since 1859, has shown that even these provisions are inadequate to avert the wholesale enhancement of rents in Bengal, and especially in Behar Rent Com- the Government issued a Commission to inquire into the The Commissioners of 1879 desired to questions involved confirm all the rights given to the peasant by the Land Code of 1850, and proposed to augment them They recommended that the first class of cultivators, who have held their land at the same rates since 1793, should never have their rent raised That the second class, or those who have thus held for twenty years, should still be presumed to have held since 1703 the third class of cultivators, who have held for twelve years, should have their privileges increased. The occupancy rights of this class would, by the recommendations of the Commission, be consolidated into a valuable peasant-tenure, transferable by sale, gift, or inheritance The Commissioners also proposed that any increase in the value of the lind or of the crop, not arising from the agency of either the landlord or the 'occupancy tenant,' shall henceforth be divided equally between them This provision is a very important one in a country like Bengal, where new railways, new roads, and the increase of the people and of trade constantly tend to raise the price of the agricultural staples. What political economists call the 'unearned increment,' would, if this proposal were adopted, be halved between the proprietor and the cultivator with occupancy rights

But the great changes proposed by the Rent Commissioners of 1870 referred to the fourth or lowest class of husbandmen, who have held for less than twelve years, and whom the Land Code of 1850 admitted to no rights whatever missioners proposed to accord a quasi-occupancy right to all tenants who had held for three years. If the landlord

Three years tenants. demanded an increased rent from such tenant, and the tenant preferred to leave rather than submit to the enhancement, then the landlord would have to pay to him-first, a substantial Compensa compensation for disturbance, and second, a substantial com-tion for pensation for improvements

The proposals of the Commissioners were partially, but only partially, embodied in the Bengal Tenancy Act of 1885

Finally, after a long and acrimonious discussion, a Rent Rent Law Law for Bengal, substantially based upon the Report of the of 1885 Commission of 1879, was passed in the present year (1885)

The Permanent Settlement was confined to the three Provinces of Bengal, Behar, and Orissa, according to their boundaries at that time Orissa proper, which was conquered from Orissa the Marathas in 1803, is subject to a temporary Settlement, of Settle ments, which the current term of thirty years will not expire until 1803-38 The assessment is identical with that fixed in 1838, which was based upon a careful field-measurement and upon an investigation into the rights of every landholder and under-The Settlement, however, was made with the landholder, and not with the tenant, and in practice the rights of the cultivators are on the same footing as in Bengal

In Assam Proper, or the Brahmaputra valley, the settle Assam ment is simple and effective The cultivated area is artificially ment divided into mausas or blocks, over each of which is placed yearly a native official or mausadár Every year the mauzádar ascertains the area actually under cultivation, and then assesses the fields, according to their character, at a prescribed rate The prevailing system throughout the Madras Presidence

is the rayatwari, which takes the cultivator or peasant pro-Rayatwari prietor as its rent paying unit, as the Bengal system takes the in Madras zamindar This system cannot be called indigenous to the country, any more than the samindári is to Bengal When the British declared themselves heir to the Nawab of the Karnatik at the beginning of the present century, they had no adequate experience of revenue management. The authorities in England favoured the zamindari system already at work in Bengal,—a system which appeared best calculated to secure punctual payment The Madras Government was accordingly Its history instructed to enter into permanent engagements with samindars, and where no zamindárs could be found, to create substitutes out of enterprising contractors. The attempt resulted in utter failure, except in tracts where the zamındárs happened to be Zaminda i the representatives of ancient lines or powerful chiefs Several failed

such chiefs exist in the extreme south and in the north of the

## 446 BRITISH ADMINISTRATION OF INDIA

Sir Thomas Munro, 1820

Madras method of 1-ses-ment

Presidency Their estates have been guaranteed to them on payment of a peshkash or permanent tribute, and are saved by the custom of primogeniture from the usual fate of sub-division Throughout the rest of Madras, the influence of Sir Thomas Munro led to the adoption of the rayatwari system, which will always be associated with his name

According to this system, an assessment is made with the cultivator for the land actually taken for cultivation Neither samindar nor village community intervenes between the cultivator and the State The early ráyatwárí settlements in Madras were based upon insufficient experience were preceded by no survey, and they had to adopt the crude Since 1858, a department of estimates of native officials Revenue Survey has been organized, and the assessment carried out de novo

first, measure ment, second. produce third, fixing the 11te

Nothing can be more complete in theory than a Madras First, the area of the entire District. rávatwári settlement whether cultivated or uncultivated, and of each field within the District, is accurately measured. The next step is to calculate estimate of the estimated produce of each field, having regard to every kind of both natural and artificial advantage. Lastly, an equitable rate is fixed upon every field. The elaborate inture of these inquiries and calculations may be inferred from the fact that as many as 35 different rates are sometimes struck for a single District, ranging from as low as 6d to as high as f, 1, 4s per acre The rates thus ascertained by the revenue survey are fixed for a term of thirty years

Thuty \ ears settlemen

**Vladras** vearly jamáhandi

But during that period the aggregate rent roll of a District is liable to be affected by several considerations. New land may be taken up for cultivation, or old land may be abandoned, and occasional remissions may be permitted under no fewer than eighteen specified heads matters are decided by the Collector at the jamábandi, or inquest held every year for ascertaining the amount of revenue to be paid by each rajat for the current season annual inquiry has sometimes been mistaken for a yearly re assessment of the rayat's holding. It is not, however, a change in the rates for the land which he already holds, but an inquiry into and record of the changes in his holding, or of any new land he may wish to take up

Permanent m Madras

Certain of the Madras Districts on the seaboard adjoining Settlement Bengal were granted on a Permanent Settlement to zamindárs, hereditary native chiefs or revenue-farmers The land thus permanently settled forms one eighth of the area of

Throughout the other seven-eighths, the ráyatwári settlement has raised the cultivator into a peasant proprietor This person was formerly the actual tiller of the soil as population increased under British rule, the value of the land rose, and the peasant proprietor has in many cases been able to sub-let his holding to poorer cultivators, and The The Government cultivator to live, in whole or part, off the rent has during the same period decreased rather than increased grows its average land-tax per acre throughout the Madras Presi proprietor dency For as the people multiplied, they were forced back upon inferior soils, and the average Government demand per acre has been proportionately diminished. But the very same process of falling back on the inferior soils has, according to economical principles, created the possibility of levying a rent from the superior soils This rent is enjoyed by the former cultivators, many of whom are thus growing into petty landholders, living upon the rent of fields which their fathers tilled with their own hands

An idea of the increase of population in Madras, and of the Extension extension of cultivation, may be obtained from the following in Madias, figures — In 1853, the general population was estimated 1853-81 at 22 millions, in 1878, at 311 millions, showing an increase of 43 per cent, or nearly one-half, and in 1881 (after the great famine of 1876-78), at a little over 31 millions cultivated land, held by husbandmen direct from the State, had, between 1853 and 1878, increased from 12 to 20 millions of acres, or 66 per cent, exactly two-thirds The area of Exceeds tillage had, therefore, not only kept pace with the increase of the of population, but had extended at a ratio of 50 per cent population more rapidly This resulted partly from the fact that the inferior lands, now reclaimed, could not support so large an average of people as the superior lands, which were already in cultivation at the commencement of the period Government recognised this, and has accordingly increased its rental only from 3 millions to 34 millions sterling, being only 26 per cent, or one-fourth, while the area of cultivation has increased by 66 per cent The Government, in fact, has reduced its average rental over the total area of cultivation from 5s an acre in 1853 to 3s 10d an acre in 1878, or over 23 per cent, say one fourth According to the ordinary theory of rent, rates should have risen enormously during that period, and they have risen enormously wherever the land is held by private proprietors

As regards the Madras Presidency, the facts may be recapitu-

of average land tax

Reduction lated thus During the 25 years ending 1878, the area of cultivation had increased by 66 per cent, or two-thirds, the population by 43 per cent, or nearly one-half, and the Government rental by only 26 per cent, or one-fourth, while the average rates of land tax per cultivated acre had been actually reduced by about one-fourth, from 5s an acre in 1853 to 3s 1od an acre in 1878, and to 3s 8d an acre in 1883 Instead of taking advantage of the increase of population to enhance the rental, the Madras Government has realized the fact that the increase in numbers means a harder struggle for life, and has reduced instead of enhancing, according to the economic laws of rent, the average rates throughout its domains

Land system of Bombay

Bombay has also a land system of its own, which requires to be distinguished from the rayatwari of Madras, although resembling it in principle. In the early days of our rule, no regular method existed throughout the Bombay Presidency, and at the present time there are tracts where something of the old confusion survives. The modern 'survey tenure,' as it is called, dates from 1838, when it was 'survey tenure' of first introduced into one of the taluks of Poona District it has since been gradually extended over the greater part of the Presidency As its name implies, the Settlement is preceded by survey Each field is measured, and an assessment placed upon it according to the quality of the soil and the crop This assessment holds good for a term of thirty years ordinary rates vary in different Districts from 4s 6d an acre in the rich black-soil lands of Gujarát, to rod an acre in the hills of the Konkan

Its rates

Bombay

Its sum plicity

The primary characteristic of the Bombay system is its The Government fixes a minimum area as the revenue assessment unit, below which it refuses to recognise This minimum area, technically called a 'field.' varies from 20 acres upwards, in different Bombay Districts The 'field' is therefore the unit, and its actual occupier is the only person recognised by the revenue law exactly what he will have to pay, and the State knows what it will receive, during the currency of the term The assessment is, in fact, a quit-rent liable to be modified at intervals of thirty years. The Bombay system is also characterized by its fairness to the tenant. He possesses 'a transferable and heritable property, continuable without question at the expiration of a settlement lease, on his consenting to the revised rate.' To borrow a metaphor from English law, his position has been raised from that of a villein to that of a copyholder

In place of the bare permission to occupy the soil, he has Its advan received a right of property in it

Some of the Bombay peasants have proved unequal to vident the responsibilities of property which they had not won by Its disad In rich districts, the men who were to the im their own exertions recorded as the actual occupiers are able to let their land provident to poorer cultivators, and so live off the toil of others upon fields which they themselves had formerly to till proprietary rights give the peasant a power of borrowing which he did not possess before In certain parts, especially in the dry Districts of the high-lying Deccan, the husbandmen have got hopelessly into debt to the village bankers peasant was often improvident, the seasons were sometimes unfortunate, the money lender was always severe

Amid the tumults of native rule, the usurers lent com Debts of paratively small sums If the peasant failed to pay, they the Deccan peasant could not evict him or sell his holding, because, among other reasons, there was more land than there were people to till it The native Government, moreover, could not afford to lose a Accordingly the bankrupt peasant went on, year after year, paying as much interest as the money-lender could squeeze out of him, until the next Maratha invision or Muhammadan rebellion swept away the whole generation of usurers, and so cleared off the account. Under our rule there is no chance of such relief for insolvent debtors, and our rigid enforcement of contracts, together with the increase of the population, has armed the creditor with powers formerly For the peasant's holding under the British Government has become a valuable property, and he can be readily sold out, as there are always plenty of husbandmen anxious to buy in The result is two fold. In the first place, the village banker lends larger sums, for the security is increased, and in the second place, he can push the peasantry to extremities by eviction, a legal process which was economically mpossible, and politically impermissible, under native rule

In Bengal, the cry of the peasant is for protection against Bombay the landlord In South-western India, it is for protection Relief against the money lender After a careful inquiry, the Governand 1881 ment determined to respond to that cry It has practically said to the village bankers 'A state of things has grown up under British rule which enables you to push the cultivators, by means of our Courts, to extremities unknown under the native dynastics, and repugnant to the customs of India Henceforth, in considering the security on which you lend money,

please to know that the peasant cannot be imprisoned or sold out of his farm to satisfy your claims, and we shall free him from the lifelong burden of those claims by a mild bankruptcy law' Such is the gist of the Southern India Agriculturists' Relief Acts of 1879 and 1881

Its pro visions for the hus

This Act of 1879 provides, in the first place, for small rural debtors of £5 and under If the Court is satisfied that bandman, such a debtor is really unable to pay the whole sum, it may direct the payment of such portion as it considers that he can pay, and grant him a discharge for the balance gives powers to the Court to go behind the letter of the bond, to cut down interest, and to fix the total sum which may seem to the judge to be equitably due

As a miral Act

To debtors for amounts exceeding £5, it gives the full pro-Insolvency tection of an Insolvency Act No agriculturist shall henceforth be arrested or imprisoned in execution of a decree for money In addition to the old provisions against the sale of the necessary implements of his trade, no agriculturist's immoveable property shall be attached or sold in execution of any decree, unless it has been specifically mortgaged for the debt to which such decree relates But even when it has been specifically mortgaged, the Court may order the debtor's holding to be cultivated, for a period not exceeding seven vears, on behalf of the creditor, after allowing a sufficient portion of it for the support of the debtor and his family At the end of the seven years, the debtor is discharged

Rural Procedure

If the debtor himself applies for relief under the Insolvency Insolvency clauses, the procedure is as follows —His moveable property, less the implements of his trade, are liable to sale for his His immoveable property, or farm, is divided into two parts, one of which is set aside as 'required for the support of the insolvent and members of his family dependent on him,' while the remainder is to be managed on behalf of his creditors But 'nothing in this section shall authorize the Court to take into possession any houses or other buildings belonging to, and occupied by, an agriculturist.' Village arbitrators or 'conciliators' are appointed by the same Act, and every creditor must first try to settle his claims before them the effort at arbitration fails, the 'conciliator' shall give the applicant a certificate to that effect. No such suit shall be entertained by any Civil Court, unless the plaintiff produces a certificate from the local 'conciliator' that arbitration has been attempted and failed The Act of 1879 has been somewhat modified by the amending Act of 1881

' Concilia tors

The North-Western Provinces and the Punjab have practically Land one land system In those parts of India, the village community  $_{N}^{system}$  of  $_{N}^$ has preserved its integrity more completely than elsewhere vinces and Government therefore recognises the village, and not the Punjab zamindár's estate or the ráyat's field, as the unit of land administration The village community takes various forms Corporate Sometimes it holds all the village lands in joint-ownership, the holdings share of each co-owner being represented by a fractional part of the gross rental Sometimes part of the lands is held in common and part in severalty, while sometimes no common lands remain, although a joint responsibility for the Government revenue still subsists

The Settlement in the North-Western Provinces and the Land Punjab is more comprehensive than in Madras or Bombay addition to measurement and agricultuial appraisement, it in- Western cludes the duty of drawing up an exhaustive record of all rights and Provinces and sub-tenures existing in every village The proprietors are Punjab alone responsible for the revenue, but while the State limits its claims against them, it defines the rights of all other parties interested in the soil. The term of settlement in the North-Western Provinces and in the Punjab is thirty years principle of assessment is that the Government revenue shall be equal to one-half of the rent, leaving the other half as the share of the landlord, who is liable for due payment, and has the trouble of collecting it from the cultivators The average rate of assessment is as 5d per acre in the North-Western Provinces, and 2s in the Punjab This is at the nominal con version of 10 rupees to the pound sterling. At the actual value of the rupee (1885), the rates would be 2s 7d in the North-Western Provinces, and is 6d in the Punjab, per acre

In Settlement in North

Oudh, the Indian Province most recently acquired has a Land peculiar land system, arising out of its local history Oudh tálukdars resemble English landlords more closely even The taluk than do the samindars of Bengal In origin, they were not dars revenue farmers but territorial magnates, whose influence was derived from feudal authority, military command, or hereditary Their present status dates from the pacification after the Mutiny of 1857 The great tálukdárs were then invited to become responsible each for a gross sum for the estates which they were found to hold prior to our annexation of Oudh The exceptional position of the talukdars was recognised by conferring upon them, not only the privilege of succession by primogeniture, but also the power of bequest by will-a landright unknown alike to Hindu and Muhammadan law Land

not comprised in táluldárí estates was settled in the ordinary way with its proprietors or zamíndárs for a term of thirty vears. The whole of Oudh has since been accurately surveyed

Land system of Central Provinces

The Central Provinces contain many varieties of land tenure, from the feudatory chiefs, who pay a light tribute, to the village communities, who are assessed after survey Population is sparse and agriculture backward, so that the incidence of land revenue is everywhere low. The survey was conducted generally on the Punjab system adopting the 'estate' as the unit of assessment. But in the Central Provinces the British Government gave proprietary rights to the former revenue farmers, or fiscal managers of villages, under native rule. It thus created a body of landholders between itself and the cultivators. Of the rental paid by the husbandmen, the Government ordinarily takes one-half as land tax, and allows one half to the proprietary body. The current settlement, for a term of thirty years, will expire in 1897.

Land revenue of Lutish India

The gross land revenue realized from territory under British administration in India, amounted to  $f_{21,876,067}$  in 1882-83 During the ten years ending 1882-83, it averaged £21,283,764. which is raised to about 223 millions by the inclusion of certain local rates and cesses levied on land figure shows an average of a fraction less than 10d per culti-The average annual cost of collecting the land revenue during the ten years ending 1882-83 was £2,945,151, or close on three millions sterling. The highest average rate of assessment estimated per head, is in Bombay, namely, 35 101d per head of population, the lowest, is 23d per head, in Bengal The net land revenue realized from British India. deducting charges of collection, during the ten years ending March 1583, averaged 183 millions sterling In 1882-83, the land revenue of British India was 214 millions cross, and 184 millions net 1

Salt adinini stration

Sources

THE SALT DUTY—Salt ranks next to land revenue among the items of actual taxation in India, opium being excluded, as paid by the Chinese consumer—Broadly speaking, the salt consumed in India is derived from four sources—(1) importation by sea, chiefly from the mines of Cheshire, (2) solar evaporation in shallow tanks along the seaboard, (3) gatherings from the Salt Lakes in Rajputána, (4) quarrying in the Salt Hills of the Northern Punjab—Until recently, the tax

levied upon salt varied very much in different parts of the country, and a numerous preventive staff was stationed along a continuous barrier hedge, which almost cut the peninsula into two fiscal sections

The reforms of Sir J Strachey in 1878, by which the Equalizahigher rates were reduced while the lower rates were raised, too of salt duty and their subsequent equalization over the whole country, have effectually abolished this engine of oppression munication is now free, and it has been found that prices are lowered by thus bringing the consumer nearer to his market, even though the rate of taxation be increased In the Punjab and Rajputana, salt administration has become, as in Lower Bengal, a simple matter of weighing quantities and levying a uniform tax In Bombay, also, the manufacture is Systems now conducted with a minimum of expense at large central of munu depôts in Gujarat (Guzerat), under a thorough system of excise supervision Along the eastern coast, however, from Orissa to Cape Comorin, the process of evaporating serwater is carried on as a private industry, although under official supervision and on Government account

The process of manufacture in Madris is exceedingly simple, Process and at the same time free from temptations to smuggling The of manufacture season lasts from about January to July, in which latter month the downpour of run usually puts a stop to operations site is selected in the neighbourhood of one of the backwaters or inlets which abound along the coast commencing, the proprietor of the salt-pan must each year obtain the consent of the Collector of the District, and must engage to supply a certain quantity of salt. The first step is to form a series of pans or reservoirs of varying degrees of shallowness by banking up the earth, with interconnecting channels Into the outer and deepest of these pans, the seawater is baled by means of a lever and bucket lift, and there allowed to stand for some days until it has by exporation acquired the consistency of brine I he brine is then passed through the channels into the remainder of the series of gradually shallowing pans. At last it becomes crystallized salt, and is scraped off for conveyance to the wholesale depôt It is estimated that, in a favourable season, this process may be repeated de novo from twelve to fifteen times, according as the weather permits But a single shower of rain will spoil the whole operation at any stage

Like the poppy cultivation in Bengal, the manufacture of salt in Madras is a monopoly, which can be defended by the

Working of the monopoly in Madras

circumstances of the case No one is compelled to manufacture, and rights of property in a salt-pan are strictly respected, while the State endeavours, by means of a careful staff of supervisors, to obtain the maximum of profit with a minimum of interference The system as at present carried on has been gradually developed from the experience of nearly a century The manufacturers belong to the same class as the ordinary cultivators, and, as a rule, their condition is somewhat more prosperous, for they possess a hereditary privilege carrying with it commercial profits They do not work upon a system of advances, as is the case with so many other Indian industries, but they are paid at a certain rate when they bring their salt to the Government depôt This rate of payment, known as kudisva-1 am, is at present fixed at an average of 1 anná 5 8 pies (or about 21d) per maund of 82: lbs, the other expenses of the Salt Department for supervision, etc., raise the total cost to 3 ánnás 5 6 pies (or about 51d) per maund The price charged to the consumer by the Madras Government, up to March 1882, was Rs 2 8 (or about 5s) per maund, the balance being net profit

Cost of salt in Madras

Duty of

Fqualiza tien of duty The equal rate of salt duty which now prevails throughout all continental India is Rs 2 per maund, or 5s 5d a cwt In British Burina, only 3 annas per maund, or 6d a cwt, are charged for local consumption, and a transit duty of 1 per cent ad valorem for salt sent across the frontier. In the salt tracts on the west of the Indus, excluding the Kalabagh mines, a special rate of 8 ánnas per local maund of 103 lbs. is charged. The total salt revenue of British India in 1882-83 was returned at £6,177,781, the average for ten years being £6,627,194

Lxcise admini stration Excise Duties in India are not a mere tax levied through the private manufacturer and retailer, but (like salt) a species of Government monopoly. The only excisable articles are intoxicants and drugs, and the object of the State is to check consumption, not less than to raise revenue. The details vary in the different Provinces, but the general plan of administration is the same. The right to manufacture, and the right to retail, are both monopolies of Government, let out to private individuals upon strict conditions. Distillation of country spirits is permitted under two systems—either to the highest bidder under official supervision, or only upon certain spots set apart for the purpose. The latter is known as the sade or central distillery system.

Central distulery system highest bidder, subject to regulations fixing the quantity of Rice heer liquor that may be sold at one time The brewing of beer from rice and other grains, a process universal among the hill tribes and other aboriginal races, is practically untaxed and unrestrained The numerous European breweries at the hill stations pay a tax at the rate of 6d a gallon. A large business in brewing is now done at Simla, Marri (Murree), Kasauli, Massuri, Nainí Tal, Solán, and in the Nílgiris An attempt is being made to establish breweries on the plains

Excise duties are also levied upon the sale of a number of intoxicating or stimulant drugs, of which the most important are opium and gángá or bhang Opium is issued for local Opium consumption in India from the Government manufactories at Patná and Benares, and sold through private retailers at a monopoly price This drug is chiefly consumed in Assam, Burma, and the Punjab Ganjá is an intoxicating preparation Gan, a made from the flowers and leaves of Indian hemp (Cannabis satura, var indica) The cultivation of hemp for this purpose is chiefly confined to a limited area in Rajsháhi District, Bengal, and to the inner valleys of the Himalayas, whence the drug is imported under the name of charas Its use is a fre- Charas quent cause, not only of crime, but also of insanity Government attempts to check consumption—first, by fixing the retail duty at the highest rate that will not encourage smuggling, and second, by continually raising that rate as experience Strictly speaking, gánjá consists of the flowering and fruiting heads of the female plant, bhang or stiddhi, of the dried leaves and small stalks, with a few fruits, while charas is the resin itself, collected in various ways as it naturally exudes

No duty is at present levied upon tobacco in any part Tobacco of British India The plant is universally grown by the cultivators for their own smoking, and, like everything else, was subject to taxation under native rule, but the impossibility of accurate excise supervision has caused the British Government to abandon this impost. The total excise revenue of British India in 1882-83 was returned at £3,609,561, the average for ten years being £,2,774,073

THE MUNICIPALITIES at present existing in India are a Municipal creation of the Legislature, indeed, a recent branch of our administration system of administration Their origin is to be traced, not to the native pancháyat, but to the necessity for relieving the District officer from some of the details of his work

The old 'Council of Five,'

pancháyat or elective Council of Five is one of the institutions most deeply rooted in the Hindu mind. By it the village community was ruled, the head-man being only its executive official, not the legislator or judge. By it caste disputes were settled, by it traders and merchants were organized into powerful guilds, to the rules of which even European outsiders have had to submit. By a development of the panchayat, the Sikh army of the khálsá was despotically governed, when the centralized system of Ranjit Singh fell to pieces at his death

Muni cipalities succeed it

The village organization was impaired or broken up under Mughal rule Municipal institutions have gradually developed in place of the old Hindu mechanism of rural government, which had thus worn out or disappeared. roads, and sanitation are the three main objects for which a modern Indian municipality is constituted. In rural tracts, these departments are managed (in different Provinces) by the Collector, or by one of his subordinate staff, or by a Local Fund Board Within municipal limits, they are delegated to a Committee, who, until lately, derived their practical authority from the Collector's sanction, implied or expressed Except in the larger towns, the municipalities can scarcely be said as yet to exhibit the attributes of popular representation or of vigorous corporate life But the Local Government Acts. passed during Lord Ripon's Vicerovalty (ante, p 428), have given a new impulse to the rural and municipal boards education advances, they will doubtless be further developed

Mun cipal statistics 1877-83

In 1876-77, excluding the three Presidency capitals, there were altogether 894 muncipalities in British India, with 12,381,059 inhabitants, or just 7 per cent of the total population. Out of an aggregate number of 7519 inembers of municipal committees, concerning whom information is available, 1794 were Europeans and 5725 natives, 1863 were exception, 4512 were nominated by Government, and 1144 elected, the last class being almost confined to the North Western and Central Provinces. The financial statistics of these municipalities are given in a later section of this chapter.

In 1882-83, the municipalities in British India, exclusive of the three Presidency cities, numbered 783, with 12,923,494 inhabitants. The passing of the Local Self Covernment Acts (1882-84) has extended the elective principle, in a larger or smaller measure, all over India. The three great municipalities in the Presidency towns of Calcutta, Madras, and Bombay administered a population in 1877 of 1½ in illion. Their governing bodies aggregated 176 members, of

whom 122 were natives Eighty of the members were elected by the ratepayers In 1882-83, the municipalities of Calcutta, Bombay, and Madras governed a population of  $1\frac{2}{3}$  million, the members of the three municipal bodies numbered 171, of whom 93 were elected <sup>1</sup>

FINANCE — It is difficult to present a view of Indian Imperial finance, which shall be at once concise and intelligible. The finance subject is full of controversies, and obscured by different

## 1 Note on Indian Statistics

It may here be convenient to explain the considerations which have led to the selection of the years for which statistics are given in this and the following chapters The Indian returns are rendered with great promptitude by the Government of India, in India itself But these returns deal with a dozen Provinces and Administrations, covering an area equal to Europe less Russia A considerable interval necessarily elapses between the local issue of the returns by the Indian Government and their final compilation and revision for Parliamentary purposes During this revision, the totals are frequently altered owing to inter provincial adjust ments and other operations of account The final presentment to l'arliament is, however, the only authoritative English source of Indian statistics. It has therefore been adopted, so far as possible, in the pre-The latest return, in its final shape, as presented to both Houses of Parliament by command of Her Majesty, which has reached the author before the sheets went to press in the summer of 1885, is the Blue Book entitled the Statist cal Abstract relating to British India from 1873 74 to 1882-83 This admirable compilation of Mr Charles Prinsep, Statistical Reporter in the India Office, has therefore been accepted as fixing the period to which information should be brought down in the present work -namely the 31st March 1883

But the present author has also been guided in his selection of dates by other considerations—(1) The only two Census enumerations of the Indian jopulation as a whole were taken respectively in 1872 and in 1881 These years are, therefore, the two great landmarks in Indian statistics (2) The first edition of the present work took the year 1877, or in some cases 1878, as the latest period for which the final presentment of Indian statistics was available when it was written. The author has felt that it may be convenient to enable the reader to compare the progress during the quinquennial interval (1878 to 1885) He has therefore, in most cases, given the two sets of figures for 1877-78 and 1882-83 (3) In some departments it has been found practicable to bring down the final figures to 1884, and even to March 1885 This has only been done when it seemed to the author that the later statistics were required to exhibit really valuent facts. In conclusion, the author begs it will be believed that in each case careful consideration has been devoted to the selection of the years for which the statistics are given. The individual considerations in different departments are too numerous to specify It should always be remembered that the final presentment to Parliament of Indian statistics and accounts, available to the author when the sheets went to the press, refers to the decade ending 1852-8,

In the first place,

presentments of the same sets of accounts

Its ob scurities

The 'busi nes' of the Indian Govern ment

the aggregate revenue and expenditure are officially returned according to a system which, although necessary for Indian purposes, is apt to mislead the English critic Government is not a mere tax-collecting agency, charged with the single duty of protecting person and property system of administration is based upon the view that the British power is a paternal despotism, which owns, in a certain sense, the entire soil of the country, and whose duty it is to perform the various functions of a wealthy and an enlightened proprietor It collects its own rents It provides, out of its own capital, facilities for irrigation, means of com munication, public buildings, schools, and hospitals takes on itself the businesses of a railway owner, and of a manufacturer on a grand scale, in the case of opium and salt These departments swell the totals on both sides of the balance-sheet with large items, neither of the nature of taxation nor of administrative expenditure

Changes ın system of account

In the second place, the methods of keeping the Indian public accounts have been subjected to frequent changes during recent years, to such an extent as to vitiate all comparative statements for long periods of time. The commercial traditions, inherited from the days of the Company, regulated the Indian accounts until about the year 1860 From that date efforts have been made to bring the methods of Indian accounting into conformity with the English system of public accounts It results that the same entries represent different facts at different periods Thus, under the Company, the items usually represented the net sums, they now represent the gross sums At one period, the gross receipts are shown, with a per contra for the charges of collection or for refunds At another time. important classes of charges have been transferred from the Imperial to the Provincial Budgets, to be brought back again after an interval of a few years to the Imperial Budget, and again Capital expenditure on public transferred to Local Finance works, at one period charged to current revenue, is at another period excluded, as being 'extraordinary' or 'reproductive' The result The entire net income of the railways, whether the property of the State or of guaranteed companies, has now been entered as Imperial revenue, and the interest to shareholders as Imperial The Indian accounts represent, therefore, not expenditure only the Indian taxation and the cost of administration represent the trade expenses and profits of the Government as a great railway owner, canal maker, opium manufacturer, salt

ing ob--curities monopolist, and pioneer of new industries. They also represent these profits and expenses under diverse systems of account at different periods

The following pages will first endeavour to exhibit the actual taxation of British India, as compared with that of the Mughal Empire They will then show the gross revenue and expenditure of British India, whether of the nature of taxation or otherwise, and analyze its principal items

The Actual Taxation paid by the people of British India Gross during the ten years ending 1879, averaged 35\frac{1}{3}\$ millions taxation of British I he subjoined tables show the gross items, exclusive of India the opium duty which is paid by the Chinese consumer, tributes from foreign or feudatory States, forest receipts, and the Mint The actual taxation arranges itself under seven branches, as given in Statement I on the next page, from 1869 to 1879

This table was compiled from a special Parliamentary Return, and shows the net taxes, after deducting drawbacks and items not of the nature of actual taxation. Statement II shows the revenue from the same items during the four following years, 1880-83, but without deductions or drawbacks. The average of these four years is  $40\frac{3}{4}$  millions, without deductions or drawbacks, against  $35\frac{1}{3}$  millions, after deductions and drawbacks, during the ten years ending 1879

The net taxation of British India, that is to say, the sums Net and realized, less the cost of collection, averaged 32 millions <sup>1</sup> gross taxation during the ten years ending 1879 Returns of net taxation, of British however, depend much upon the method on which they are India prepared But the final accounts as presented to Parliament enable us to arrive accurately at the gross taxation paid by the Indian people, which, as above shown, was 35\frac{1}{3} millions during the ten years ending 1879, or a rate of 3s 8d per head

This rate contrasts alike with that now paid by the taxpayer English in England, and with that formerly paid in India under the and Indian Mughal Empire The 34 millions of people in Great Britain taxation and Ireland pay 68 millions of Imperial taxation, besides heavy local and municipal burdens. The revenues of the [Sentence continued on tage 462]

<sup>&</sup>lt;sup>1</sup> Compiled from the Parliamentary Return, 8th July 1880, pp 4, 5
<sup>2</sup> Customs, 20 millions, Inland revenue, 48 millions total taxation, 68 millions The gross revenue of the United Kingdom in 1880 was £81,265,055, besides £29,247,595 of local taxation, total, £110,512,650

## SINIFMENIT

ACTUAL LYNCHON OF BRITISH INDIA, 1869-79

compiled from the Parliamentary keturn dated 8th July 1880

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135 301,500

Ye ulv Aver the of Gross Lanthon

SFATEMFNI II

Combiled from the Ex, hteenth Parliamentary Statistical Vistract relating to British India ACTUAL TAXATION OF BRITISH INDIA TROM 1879-80 TO 1882-83

		1879-80	18081	1861-82	1882 83	Total for the Four Years
	,	_				,
Land Reven is *		£21 861 150	£31 112 995	£21 948 022	£21 876 047	£86 798 214
Salt		£11 992 L	7 115 988	7 375 620	6 177 781	27 935,802
Stamps		3 193 739	3 250 581	3 381 372	3 379 681	13 205 373
Excise		2 838 021	3 135 226	3 427 374	3 609 E	13 010 082
Customs		2 280 793	2 539 612	2 361 388	1 296 119	8 477 912
Assessed Taxes		785 318	5,38 720	516 829	517 811	2 398 678
Provincial Rates		2 882 125	0 176 370	2 895 490	2 683 or 5	11 237 000
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Average actual taxatton, without allowing for refunds and drawbacks, during the four years 1879-83, £40,765,765 It must be remembered, in comparing recent taxatton in India with previous totals, that the value of the rupee has greatly declined, while the official conversion into pounds sterling is still made at the old nominal rate of ten supecs to the pound. The purch using power of the traxatton received in recent years is therefore less than the totals in sterling would appear to indicate

I schuding I and Resenue due to Irig thon

Sentence continued from page 459 ]

Mughal Empire, derived from a much smaller population than that of British India, varied, as we have seen, from 12 millions net under Akbar in 1593 to 80 millions under Aurangzeb in 1695. The trustworthiness of these returns has been discussed in a previous chapter, and they must be taken subject to the qualifications therein indicated.

If we examine the items in the Mughal accounts, we

find the explanation of their enormous totals The land-tax

then, as now, formed about one-half of the whole revenue

The net land revenue demand of the Mughal Empire averaged 25 millions sterling from 1593 to 1761, or 32 millions during

revenue there were under our predecessors not less than forty imposts of a personal character. These included taxes upon religious assemblies, upon trees, upon marriage, upon the peasant's hearth, and upon his cattle. How severe some of

purposes of this tax the non-Muhammadan population was

divided into three classes, paying respectively £4, £2, and £1 annually to the Exchequer for each adult male. The lowest of these rates, if now levied from each non Musalman male adult, would alone yield an amount exceeding our whole actual taxation. Yet, under the Mughals, the poll-tax was

them were, may be judged from the poll tax

Indian tixation under the Vlughals,

the last century of that Empire, from 1655 to 1761 The annual net land revenue raised from the much larger area of British India, during the ten years ending 1879, has been 18 millions sterling (gross, 21 millions) But besides the land

much heavier than now

Mughal

po l'tax

Summary

only one of fortv burdens

We may briefly sum up the results Under the Mughal Empire, 1593 to 1761, the existing returns of the Imperial demand averaged about 60 millions sterling a year During the ten years ending 1879, the Imperial taxation of British India, with its far larger population, averaged 35 millions, and for the four years ending 1882–83, 40½ millions, without allowing for refunds and drawbacks Under the Mughal Empire, the land-tax between 1655 and 1761 averaged 32 millions. Under the British Impire, the net land-tax has, during the ten years ending 1879, averaged 18 millions, and 18½ millions during the four years ending 1882–83

Taxation of Japan

Not only is the taxation of British India much less than that raised by the Mughal Emperors, but it compares favourably with the taxation of other Asiatic countries in our own days. The only other Empire in Asia which pretends to <sup>1</sup> Ante, chap xi p 299, etc., table of Mughal Revenues (1593 to 1761)

a civilised government is Japan The author has no special acquaintance with the Japanese revenues, but German statists show that over 11 millions sterling are there raised from a population of 34 million people, or deducting certain items, a taxation of about 6s a head In India, where we try to govern on a higher standard of efficiency, the rate of actual gross taxation averaged 3s 8d a head for the ten years ending 1879, and 4s 1d per head for the four years ending 1882-83

If, instead of dealing with the Imperial revenues as a whole, Taxation we concentrate our survey on any one Province, we find these of a Province facts brought out in a still stronger light. To take a single under the instance After a patient scrutiny of the records, it was found Mughals, that, allowing for the change in the value of money, the ancient revenue of Orissa represented eight times the quantity of the staple food which our own revenue now represents 1 The native revenue of Orissa supported a magnificent court with a crowded seraglio, swarms of priests a large army, and a costly public worship Under our rule, Orissa does little more than defray and under the local cost of protecting person and property, and of its the British ırrıgatıon works In Orissa, the Rájá's share of the crops amounted, with dues, to 60 per cent, and the mildest Native Covernments demanded 33 per cent The Famine Commis sioners estimate the land-tax throughout British India 2 'at The land from 3 per cent to 7 per cent of the gross out-turn' Ample tax deductions are allowed for the cost of cultivation, the risks of the season, the maintenance of the husbandman and his family Of the balance, Government nominally takes onethird or a half, but how small a proportion this bears to the crop may be seen from the returns collected by the Famine Commissioners

Their figures deal with 176 out of the 199 millions of Rates per people in British India These 176 millions cultivate 188 acre millions of acres, grow 331 millions sterling worth of produce, and now pay 183 millions of land revenue therefore, they raise over £1, 15s worth of produce per acre, they pay to Government under 2s of land tax per acre Instead of thus paying 51 per cent as they do now, they would under the Mughal rule have been called upon to pay from 33 to so per cent of the crop The two systems, indeed, proceed

<sup>1</sup> The evidence on which these statements are based, was published in Hunter's Oissa, vol 1 pp 323-329 (Smith, Elder, & Co., 1872)

<sup>2</sup> Report of the Indian Famine Commission, part u p 90, as presented to Parliament, 1880

upon entirely different principles The Native Governments, write the Famine Commissioners, often taxed the land 'to the extent of taking from the occupier the whole of the surplus after defraying the expenses of cultivation' The British Govern ment objects to thus 'sweeping off the whole margin of profit'

Increase of popula tion

Taxation m Native

States

What becomes of the surplus which our Government declines to take? It goes to feed an enormously increased population The tax gatherer now leaves so large a margin to the husbandman, that the Province of Bengal, for example, feeds three times as many mouths as it did in 1780, and has a vast surplus of produce, over and above its own wants, for exportation 'In the majority of Native Governments,' writes the highest living authority on the question,2 'the revenue officer takes all he can get, and would take treble the revenue we should assess, if he were strong enough to exact it. In ill-managed States the cultivators are relentlessly squeezed the difference between the native system and ours being, mainly, that the cultivator in a Native State is seldom or never sold up, and that he is usually treated much as a good bullock is treated, te he is left with enough to feed and clothe him and his fairily, so that they may continue to work' John Stuart Mill studied the condition of the Indian people more decply than any other political economist, and he took an indulgent view of native institutions. His verdict upon the Mughal Government is that, 'except during the occasional accident of a humane and vigorous local administrator, the exactions had no practical limit but the imbility of the peasant to pay more'

Incidence

ni British

Lahr

The Famine Commission, after careful inquiries, state ' that of taxation throughout British India the landed classes pay revenue at the rate of 5s 6d per head, including the land tax for their farms, or is od without it. The trading classes pay 3s 3d per head, the artisans, 2s -equal to four days' wages in the year, and the agricultural labourers, is 8d. The whole taxation, including the Government rent for the land, averaged, as we have seen, 3s 8d per head during the ten years ending 1879

<sup>1</sup> Acport of the Indian I amine Commission, part is p 90, as presented 1 Parliament, 1880

<sup>-</sup> Report by Mr (now Sir) Alfred Lyall, CB, formerly Governor General's Agent in Rajputana, afterwards Foreign Secretary to the Govern ment of India, now Lieutenant Governor of the North Western Provinces and Oudh, quoted in the Despatch of the Governor General in Council to he Secretary of State, 8th June 1880 'Condition of India, Blue Look, p<sub>1</sub> 36, 37

Report of the Lamine Commission, part is p 93 (folio, 1880)

But the Famine Commissioners declare that 'any native of India who does not trade or own land, and who chooses to drink no spirituous liquor, and to use no English cloth or iron, need pay in taxation only about 7d a year on account of the salt he consumes On a family of three persons, the charge amounts to 15 od, or about four days' wages of a labouring man and his wife '1

GROSS REVENUES -But it should always be borne in mind Gross that the actual taxation of the Indian people is one thing, and balance sheet of the gross revenues of India are another As explained in a British previous paragraph of this chapter, the revenues include many India items not of the nature of taxation The following table, com piled from the Parliamentary Abstract for 1882-83 (the lates received by the author before sending these sheets to the press), exhibits the gross imperial revenue and expenditure of India for that year, according to the system of accounts adopted at the time For the reasons already given, it is practically impossible to analyse these gross totals in such a way as to show the actual amount raised by taxation, and the actual amount returned in protection to person and property The actual taxation has therefore been dealt with in the two separate statements already given. It is equally impossible to compare the gross totals with those for previous years, owing to changes that have been made from time to time in the system of entering the accounts. The only profitable plan is to take some of the items, and explain their real meaning

The list of items shows how large a portion of the gross Analysis revenue is not of the nature of taxation proper Public works, of Indian revenues including railways and irrigation and navigation canals, in 1883 alone yielded in 1882-83 upwards of 12 millions sterling, or over 17 per cent of the total Adding the items of post office and telegraphs, which also represent payment for work done or services supplied, the proportion would rise to over 102 per cent Then the sum of 94 millions gross, or nearly 71 millions net, derived from opium, being an additional 131 per cent of the gross revenue, is not a charge upon the native Not of the taxpayer, but a contribution to the Indian exchequer by the nature of taxation Chinese consumer of the drug Add to these the tributes from Feudatory States, produce of the forests, etc., and upwards [Sentence continued on page 467

1 Report of the I am u Commis ion, part ii p 93 (folio, 1880) VOI VI

## GROSS INPIRINT RIVENUI AND FALLINDIUM OF BRITISH INDIA TOR 1882-83 Complet from the Es, tenth I ar im were I to continue to Britich India

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Sentence continued from page 465]

deeds of transfer, etc

of one-third of the total gross revenue is accounted for whole revenue of British India of the nature of actual taxation, from taxation including Land Revenue, Excise, Assessed Taxes, Provincial Rates, Customs, Salt, and Stamps, amounted in 1878 to 342 millions, or 3s 7<sup>3</sup>/<sub>4</sub>d per head In 1882-83, the gross actual taxation of British India was upwards of 303 millions, or within a fraction of 4s per head, the average for the four years ending 1882-83 being a fraction over 4s 1d per head, without allowing for deductions or drawbacks

The land revenue, amounting to over 213 millions in Nature of 1882-83, forms by far the largest item Whether it should be the land properly regarded as a tax, or only as rent, is a problem for political economists to settle, but in any case, it is paid without question, as an immemorial right of the State It yielded in 1882-83, 31 per cent, or nearly one third, of the gross revenue

Of the other items of taxation, excise and stamps are practically creations of British rule The excise is a tax upon Excise intoxicating liquors and deleterious drugs, levied both on the manufacture and on the sale, according to different systems in different Provinces. Like the corresponding duty in Figland, it is voluntarily incurred, and presses hardest upon the lowest classes But unlike the English excise, it can hardly be called an elastic source of revenue, for the rate is intentionally kept so high as to discourage consumption No duty whatever is levied upon tobacco Stamps, as in England, form a complex Stamps item The greater part is derived from fees on litigation, and only a comparatively trifling amount from stamps proper on

Customs are divided into import and export duties, both Customs of which have been so greatly lightened in recent years, that their permanent maintenance may be considered doubt-Duties on exports have been altogether abolished. with the single exception of that on rice, which brings in from £,500,000 to over £800,000 per annum average for the ten years ending 1882-83 was £615,349, but there has been a steady increase since 1878 This export duty is levied at the rate of 3 annas a maund, or about 6d per cwt, being equivalent to an ad raloiem rate of about 10 per The 11 million sterling received from customs are practically made up of nearly half a million sterling levied on imported liquors, and about three quarters of a million sterling levied on exported rice. The receipts from all other import

customs in 1882-83 were under £,13,000, and those from all other exports were just over £3000, total, under £16,000, from all imports and exports, excepting imported liquors and exported rice

Cotton Duties

The import duty on cotton goods was finally abolished in March 1882, having been reduced in 1878, and again in Imported cotton manufactures had previously formed the most important item of the customs revenue 1874 to' 1882 the duty on cotton goods varied from nearly a million in 1878 to over half a million in 1881-82, the average being about three-quarters of a million sterling during the nine years preceding the total abolition of the duty

The Salt Tax

The salt tax, which yields about 6} millions a year, is a problem of greater difficulty. It is an impost upon an article of prime necessity, and it falls with greatest severity upon the lowest classes On the other hand, it may be urged that it is familiar to the people, is levied in a manner which arouses no discontent, and is the only means available of spreading taxation proper over the community. The reforms of 1878 and 1882 referred to on a previous page, have equalized the incidence of the salt tax over the entire country, with the incidental result of abolishing arbitrary and vexitious customs As stated on a previous page, the rate is now a uniform one of Rs 2 per maund, or 5s 5d per cwt, throughout British India, except in Burma where the rate is 3 annás per maund, and in the trans Indus tracts of the Punjab, where a special rate is levied of 8 annas per local maund of 103 lbs

Indian Lapendi ture, 1872-1882

GROSS EXPINDITURE —Putting aside the cost of collection and civil administration, which expluin themselves, the most important charges are the Army, Interest on Debt, Famine Relief, Loss by Lychange, and Public Works, to which may be added the complex item of Payments in Lingland expenditure has averaged about 18 millions during the ten years ending 1882-83, and in 1882-83 was 171 millions

Aimy cx penditure

the 171, millions, about 131 represent payments in India, and 4 millions payments in England In 1877-78, the total of the Indian Public Debt (exclusive of capital invested on railways

obligations or deposits not bearing interest

Public Debt

and other productive public works) was returned at over 134% millions sterling, being just 13s 6ld per head of the population In 1882-83 it was returned at over 1591 millions, or 16s per Part of this was of the nature of head of the population

The charge for

interest was 5 millions in 1877-78, and  $4\frac{1}{2}$  millions sterling in 1882-83 Ihis low charge for interest is due, in part, to the proportion of debt which does not bear interest above 'Public Debt' is independent of 1261 millions sterling invested in railways and productive works in 1877-78 which had increased to over 134 millions thus invested in 1882-83

In 1840, the public debt amounted to only 30 millions, Itsgrowth and gradually rose to 52 millions in 1857. Then came the Mutiny, which added upwards of 40 millions of debt in four years The rate of increase was again gradual, but slow, till about 1874, when famine relief conspired with public works to cause a rapid augmentation, which has continued to the present time The most significant feature in this augmentation is the large proportion of debt contracted in England

No charge has recently pressed harder upon the Indian ex-Famine chequer than that of Famine Relief Apart from loss by reduced Relief revenue, the two famines of 1874 and 1877-78 have caused a direct expenditure on charitable and relief works amounting in the aggregate to just over 14 millions. From 1878-70 to 1882-83 the expenditure on 'Tamine Relief' is returned at 31 millions (of which the greater portion was expended on Public Works, in the nature of insurance against famine, and not on actual relief), making a total of nearly 17 = millions during the ten years 1874 to 1883 inclusive This amounts to an annual charge of 13 million sterling for 'Famine Relief'

Loss by exchange is an item which has lately figured largely Loss by in the accounts, and is due to the circumstance that large exchange payments in gold require to be made in England by means of the depreciated rupee In 1869-70, the loss by exchange was more than balanced by an entry of gain by exchange on the other side of the ledger In 1876-77, the loss amounted to a little over two millions, and in 1882-83 to over three millions sterling

The expenditure on Public Works is provided from three Public sources—(1) the capital of private companies, with a Govern-Works cx ment guarantee, (2) loans for the construction of railways and penditure canals, (3) current revenue applied towards such works as are not directly remunerative In 1877-78, the capital raised for guaranteed railways amounted to 971 millions sterling, and the capital invested on State railways and other productive public works to 29 millions sterling total, 1261 millions sterling on railways and productive works In 1882-83, the quotal of the guaranteed rulways was reduced to 692 millions Railways sterling, the capital invested on State rulways and other pro-

ductive public works amounted to 64½ millions total on railways and productive public works, 134½ millions sterling in 1882-83 During the interval, 35 millions sterling of capital had been transferred from the guaranteed to the State railway account, owing to the purchase of the East India line by the Government

Local finance Independent of imperial finance, and likewise independent of certain sums annually transferred from the Imperial exchequer to be expended by the provincial governments, there is another Indian budget for local revenue and expenditure. This consists of an income derived mainly from cesses upon land, and expended to a great extent upon minor public works. In 1877–78, local revenue and expenditure were each returned at about 3½ millions, and in 1882–83 at about 4 millions.

Municit al finance

Yet a third budget is that belonging to the municipalities The three Presidency towns of Calcutta, Madras, and Bombay had in 1876-77 a total municipal income of £,668,400, of which  $f_{519,322}$  was derived from taxation, being at the rate of 7s per head of population. In addition, there were 894 minor municipalities, with a total population of 12,381,059 Their aggregate income was £1,246,974, of which £979,088 was derived from taxation, being at the rate of is 7d per In 1882-83, the total municipal revenue of the three capital towns was £1,073,715, and of the 783 minor municipalities, £1,623,522, grand total, £2,697,237 remembered that these figures refer to the period before the development of municipal institutions under Lord Ripon's legislation bore fruit. In the Presidency towns, rates upon houses, etc, are the chief source of income, but in the District munici palities, excepting in Bengal and Madras, octroi duties are more relied upon. The chief items of municipal expenditure are conservancy, roads, and police

Constitution of the army

THE INDIAN ARMY—The constitution of the Indian army is based upon the historical division of British India into the three Presidencies of Bengal, Madras, and Bombay There are still three Indian armies, each composed of both European and Native troops, and each with its own Commander-in-Chief and separate staff, although the Commander-in-Chief in Bengal exercises supreme authority over the other two There may also be said to be a fourth army, the Punjab Frontier Force, which, until 1885, was under the orders of the Lieutenant Constitute of the Propage

The Bengal army garrisons Bengal Proper and Assam, the The three North-Western Provinces and Oudh, a portion of Central Presidency India and Rájputána, and the Punjab In 1877–78 its total strength was 104,216 officers and men, of whom 63,933 were native troops In 1882–83, the Bengal army numbered Bengal 105,270 officers and men, of whom 66,081 were native troops In the Bengal native army, the distinguishing feature is the presence of 6 batteries of artillery, and an exceptionally large proportion of cavalry, both of which arms are massed in the Punjab

The Madras army extends beyond the limits of that The Presidency into Mysore, the Nizam's Dominions, the Central Madras Provinces, also to Burma across the Bay of Bengal, army and to the Andrian convict settlements. In 1877-78, its total strength was 47,026 officers and men, of whom 34,293 were native troops. In 1882-83, the Madras army numbered 46,309 of all ranks, of whom 34,283 were natives. In the Madras native army, the distinguishing features are the large proportion of sappers and miners, the small proportion of cavalry, and the entire absence of artillery

The Bombay army occupies Bombay Proper and Sind, The the Native States of Central India, and the outlying station Bombay of Aden in the Red Sea In 1877–78, its total strength was 38,355 officers and men, of whom 26,645 were native troops In 1882–83, the Bombay army numbered 38,897 officers and men, of whom 27,041 were natives

The total established strength of the European and Native Total army in British India in 1877-78 (exclusive of native artificers strength and followers) consisted of 189,597 officers and men. of 1879, whom 64,276 were Europeans, and 124,871 were native troops The four chief arms of the service were thus composed —(1) Artillery, 12,239 Furopean and 901 native, (2) cavalry, 4347 European and 18,346 native, (3) engineers, 357 European (all officers) and 3239 native, (4) infantry, 45,962 Furopean and 102,183 native In 1882-83, the 1883 total European and Native army in British India consisted of 190,476 officers and men, of whom 63,071 were Europeans, and 127,405 were native troops. The artillery consisted of 11,329 Europeans and 1861 natives, the cavalry of 4311 Europeans and 18,375 natives, besides a bodyguard of 202 troopers, engineers, 284 Europeans (all officers) and 3251 natives, and infantry, 45,766 Furopeans and 103,716 natives

Police

Police—Excluding the village witch, still muintained as a subsidiary police in many parts of the country, the regular police of all kinds in British India in 1882 consisted of a total strength of 145,421 officers and men, being an average of 1 policeman to about 6 square miles of area, or to about 1369 of the population The total cost of maintenance wes  $\pounds^2$  378,143, of which  $\pounds^2$  201,437 was payable from imperial or provincial revenues The former figure gives an average cost of about  $\pounds^2$ , 15° per square mile of area, and threepence per head of population The average pay of each constable was Rs 7 a month, or  $\pounds^8$ , 8s a year

Jails

In 1882-83, the total number of places of confinement in British India, including central and District Julis and lock ups, was 452, the total number of prisoners admitted during the year, or remaining over from the previous year, was 391,319, the daily average was 97,2-8. The places of transportation for all British India are the Andaman and Nicobar Islands, where there are two penal establishments, contuning, in 1882, a daily average of 11,454 convicts.

Education

Public Instruction in India is directly organized by the State, and is assisted by grants in aid, under careful inspection. But at no period of its history has India been without some system of pol ular education, independent of State organization or aid. The origin of the Deva-Nagari alphabet is lost in antiquity, though it is generally admitted not to be of indigenous invention. Inscriptions on stone and copper, the palm leaf records of the temples, and in later days the widespread manufacture of paper, indicate not only the general know ledge, but also the common use of the art of writing

In ancient India

From the earliest times the Brahman caste preserved, first by oral tradition, then in manuscript, a literature unrivalled in its antiquity and for the intellectual subtlety of its contents. The Muhammadan invaders introduced the profession of the historian, and attained a high degree of historical excellence, compared with European writers of the same mediæval period. Ihroughout every change of dynasty, vernacular instruction has been given, at least to the children of respectable classes, in each large village. On the one hand, the tols or seminaries for teaching Sanskrit philosophy at Benares and Nadiya recall the schools of Athens and Alexandria, on the other, the importance attached to instruction in accounts reminds one of the picture which Horace has left of a Roman education.

Vi'lage schools Sanskrit Even at the present day, a knowledge of reading and writing, taught by the Buddhist monks, is as widely diffused throughout Burma as in many countries of Europe Our own efforts to stimulate education have been most successful, when based upon the existing indigenous institutions

During the early days of the East India Company's rule, the Our first promotion of education was not recognised as a duty of efforts at Government Even in England, at that time, education was entirely left to private and mainly to clerical, enterprise State system of instruction for the whole people is an idea of the latter half of the present century But the enlightened mind of Warren Hastings anticipated this idea by founding the Calcutta Madrasa for Muhammadan teaching (1781), and by Calcutta extending his patronage alike to Hindu pandits and European and other students Lord Wellesley's schemes or imperial dominion led Colleges to the establishment of the college of Fort William for English officials Of the Calcutta seminaries, the Sanskrit College was founded in 1824, when Lord Amherst was Governor-General, the Medical College, by I ord William Bentinck in 1835, the Hugh Madrasa, by a wealthy native gentleman in 1836 The Sanskrit College at Benares had been established in 1791, the Agra College in 1823

Meanwhile, the Christian missionaries made the field of Mission vernacular education their own Discouraged by the autho Schools rities, and under the Company liable to deportation, they not only devoted themselves with courage to their special work of evangelization, but they were also the first Europeans to study the vernacular dialects spoken by the people Nearly two centuries ago, the Jesuits at Madura, in the extreme south, had so mastered Tamil as to leave works in that languige which are still acknowledged as classical by native authors About 1810 the Baptist mission at Serampur, above Calcutta, raised Bengali to the rank of a literary prose dialect. The interest of the missionaries in education, which has never ceased to the present day, although now comparatively overshadowed by Government activity, had two distinct aspects They studied the vernacular, in order to preach to the people, and to translate the Bible, they also taught English, as the channel of Western knowledge

After long and acrimonious controversy between the advo-State cates of English and of vernacular teaching, the present system system of education was based, in 1854, upon a comprehensive despatch sent out by Sir C Wood (afterwards Lord Halifax) In the midst of Indianum the tumult of the Mutiny, the three Indian Universities versities

were founded at Calcutta, Madras, and Bombay in 1857 <sup>1</sup> Schools for teaching English were by degrees established in every District, grants-in-aid were extended to the lower vernacular institutions, and to girls' schools. A Department of Public Instruction was organized in every Province, under a Director, with a staff of Inspectors. In some respects this scheme may have been in advance of the time, but it supplied a definite outline, which has gradually been filled up. A network of schools was extended over the country, graduated from the indigenous village institutions up to the highest colleges. All received some measure of pecuniary support, granted under the guarantee of regular inspection, while a series of scholarships at once stimulated efficiency, and opened a path to the university for the children of the poor

Education Commission of 1882-83

In 1882-83, an Education Commission, appointed by Lord Ripon's Government, endeavoured to complete the scheme inaugurated in 1854 by the Despatch of Lord Halifax fully examined the condition of education in each Province, indicated defects, and laid down principles for further development The results of its labours have been to place public instruction on a broader and more popular basis, to encourage private enterprise in teaching, to give a more adequate recognition to the indigenous schools, and to provide that the education of the people shall advance at a more equal pace along with the instruction of the higher classes Female education and the instruction of certain backward classes of the community. such as the Muhammadans, received special attention general effect of the Commission's recommendations is to develop the Department of Public Instruction into a system of truly national education for India, conducted and supervised in an increasing degree by the people themselves

Educa tional statistics, 1878-83 In 1877-78, the total number of educational institutions of all sorts in British India was 66,202, attended by an aggregate of 1,877,942 pupils, showing an average of one school to every 14 square miles, and one pupil to every 100 of the population. In 1882-83, the total number of inspected schools of all classes in British India had risen to 109,216, with an aggregate of 2,790,773 scholars, showing an average of one school to every 8 square miles of area, and one pupil to every 71 of the population. Male pupils numbered 2,628,402, showing one boy at school to every 38 of the male population, and female pupils, 162,371, or one girl at school to every 610

<sup>1</sup> By Act II of 1857 for Calcutta, by Act XXII of 1857 for Bombay, and by Act XXVII of 1857 for Madras

These figures, however, only include State inspected or aided schools and pupils The Census Report of 1881 returned 2,879,571 boys and 155,268 girls as under instruction throughout British India, besides 7,646,712 males and 277,207 females able to read and write, but not under instruc-The figures are evidently below the truth, and it will be remarked that the Census returns the total number of girls attending school at 5000 less than those returned as attending the State-inspected schools alone

In 1877-78, the total expenditure upon education from all Educa sources was £1,612,775, of which £782,240 was contributed finance, by the provincial governments,  $f_{1,25}$ 8,514 was derived from 1878-83 local rates, and £32,008 from municipal grants These items may be said to represent State aid, while endowments yielded £,37,218, subscriptions £,105,853, and fees and fines £277,039 I he degree in which education has been popularized, and private effort has been stimulated, may be estimated from the fact that in Bengal the voluntary payments now greatly exceed the Government grants In 1882-83, the total educational expenditure throughout British India amounted to £2,105,653, of which £,578,629 was contributed by the provincial governments, £347,376 was derived from local rates, £63,832 from municipal grants, £93,924 from subscriptions, £49,695 from Native States, £58,675 from endowments, £516,925 from fees and fines, and the remainder from other sources

The three Universities of Calcutta, Madras, and Bombay The Indian were incorporated in 1857, on the model of the University of University They are merely examining bodies, with the privilege of conferring degrees in arts, law, medicine, and civil Their constitution is composed of a Chancellor Their con engineering Vice Chancellor, and Senate The governing body, or Syndi stitution cate, consists of the Vice Chancellor and certain members of the Senate A fourth University, on a similar plan, but including the teaching element, and following more oriental lines, has been founded at Lahore for the Punjab The Universities control the whole course of higher education in India by means of their examinations The entrance examination for matriculation is open to all, but when that is passed, candidates for higher stages must enrol themselves in one or other of the affiliated colleges

In the ten years ending 1877-78, 9686 candidates success-University fully passed the entrance examination at Calcutta, 6381 at statistics Madras, and 2610 at Bombay, total, 18,610 For the ten years ending 1882-83, out of 23,226 candidates at Calcutta, 10,200 successfully passed the entrance examination, at

Madris, out of 28,575 candidates, 9715 passed, and at Bombry, out of 11,871 candidates, 3557 passed. Fotal passed entrance examination in the ten years ending 1882-83, 23,472 Many full off at this stage, and very few proceed to the higher degrees. During the same ten years ending 1882-83, 1036 graduated BA and only 281 MA at Calcutta, 896 BA and 22 MA at Madras, 456 BA, and 34 MA at Bombry total of BA's and MA's in the ten years, 2725. Calcutta possesses the great majority of graduates in law and medicine, while Bombay is similarly distinguished in engineering. In 1877-78, the total expenditure on the Universities was £22,093, and in 1882-83, £21,790.

College

The colleges or institutions for higher instruction may be divided into two classes,—those which teach the arts course of the Universities, and those devoted to special branches of knowledge According to another principle, they are classified into those entirely supported by Government, and those which only receive grants-in aid. The latter class comprises the missionary colleges In 1877-78, the total number of colleges. including medical and engineering colleges and Muhammadan madrasas, was 82, attended by 8894 students Of these, as many as 35 colleges, with 3848 students, were in Lower Bengal. and 21 colleges, with 1448 students, in Madras In the same vear, the total expenditure on the colleges was £,186,162, or at the rate of £21 per student In 1882-83, the total number of colleges, including medicine and engineering colleges and Muhammadan madrasas, was 96, attended by 8707 students Of these, 34 cooleges with 3754 students were in Bengal, 32 colleges with 2329 students were in Madras, and o colleges with 1203 students were in Bombay. In the same year, the total expenditure on colleges in British India was £173,213, or a fraction under £,20 per student

Pays' scrook,

upper schools The bows' schools include many varieties, which may be sub-divided either according to the character of the instruction given, or according to the proportion of Government aid which they receive. The higher schools are those in which English is not only taught, but is also used as the medium of instruction. They educate up to the standard of the entrance examination at the Universities, and generally train those candidates who seek employment in the upper grades of covernment service. One of these schools, known as the zila or District school, is established at the head quarters station of every District, and many others receive grants in-aid. The total number of high schools in 1882-83 was 530,

of which 492 were for males and 38 for females, the attendance in the year comprising 68,434 males and 1165 females

The middle schools, as their name implies, are inter middle mediate between the higher and the primary schools rally speaking, they are placed in the smaller towns or larger villages, and they provide that measure of instruction which is recognised to be useful by the middle classes themselves Some of them teach English, others only the vernacular This class includes the tahsih schools, established at the headquarters of every tahsil or Sub division in the North-Western In 1882-83, the middle schools numbered 3796, with an attendance of 170,642 pupils In 1877-78, the total expenditure on both higher and middle schools was £478,250. and in 1882-83, £,491,262

The lower or primary schools complete the series They are primary dotted over the whole country, and teach only the vernacular schools Their extension is the best test of the success of our educational system

No uniformity prevails in the primary school-system through Increase of out the several Provinces In Bengal, up to the last fifteen primary schools in vears, primary ins ruction was neglected, but since the reforms Bengal, inaugurated by Sir G Campbell in 1872, by which the benefit of the grant-in-aid rules was extended to the páthsalas or road side schools, this reproach has been removed In 1871-72 the number of primary schools under inspection in Lower Bengal was only 2451, attended by 64,779 pupils By 1877-78 the number of schools had risen to 16,042, and the number of pupils to 360,322, being an increase of about six-fold in six By March 1883, when Sir G Campbell's reforms had received their full development the primary schools in Bengal had increased to 63,897, and the pupils to 1,118,623 being an increase of over seventeen-fold in the eleven years ending In 1877-78, the expenditure on primary schools in Benzal from all sources was £,78,000, towards which Covernment contributed only £27,000 thus showing how State aid stimulates private outlay in primary education total expenditure in 1882-83 was returned at £,318 680 increase, however, is more apparent than real, and results from a large number of schools previously private being brought under the inspection of the Education Department, and included in its financial statements

The North-Western Provinces owe their system of primary in North instruction to their great Lieutenant Governor Mr Thomason, Provinces, whose constructive talent can be traced in every branch of the

In addition to the tahsih or middle schools administration already referred to, a scheme was drawn up for establishing halkabandi or primary schools in every central village (whence their name), to which the children from the surrounding The system in the North-Western hamlets might resort Provinces has been developed by means of the educational cess added to the land revenue Sir William Muir, during his long service in the North Western Provinces, ending in the I seutenant Governorship, did much for both the primary and the higher education of the people

Bombay in Burma

In Bombay, the primary schools are mainly supported out of local funds raised by a cess added to the land revenue

In British Burma, on the other hand, primary education is still left to a great extent in the hands of the Buddhist monks, who receive little or no aid from Government monastic schools are only open to boys, but there are also by teachers who admit girls to mixed classes administration shows a wise disposition to avail itself of the indigenous monastic system Government has comparatively few schools of its own in Burma, the deficiency being supplied by several missionary bodies, who obtain State aid

in Madras

In some localities of the Madras Presidency, also, the hissionaries possess a practical monopoly of primary education at the present day

Primary education hnance

In 1877-78, the amount of money expended upon lower and primary schools in British India was £406,135 or just one fourth of the total educational budget In 1882-83, the total expenditure on lower and primary schools throughout British India was £,911,121, or a little less than one half (£2,105,653) of the total educational expenditure of the year recommendations of the Education Commission of 1882-83, the importance assigned to primary instruction, and the proportion of the public educational funds devoted to it, will constantly tend to increase

(arls' -chools

Of late years something has been done, although not much, to extend the advantages of education to girls. In this, as in other educational matters, the missionaries have been the proneers of progress. In a few exceptional places, such as Linnevelli in Madras, the Khasi Hills of Assam, and among the Karen tribes of Burma, female education has made real progress, for in these localities the missionaries have sufficient influence to overcome the prejudices of the people clsewhere, even in the large towns and among the Englishspeaking classes, all attempts to give a modern education to

women are regarded with scarcely disguised aversion, and have obtained but slight success Efforts were at one time made by the Bengal Government to utilize the female members of the Vishnuite sects in female education, but without permanent Throughout the North-Western Provinces and Oudh, with their numerous and wealthy cities, and a total female population of over 21 millions, only 8000 girls attended school in 1877-78, and 9602 in 1882-83. In Lower Bengal. the corresponding number was less than 12,000 in 1877-78, but had increased to 57,361 in 1882-83 Madras, British Burma, and in a less degree, Bombay and the Punjab, are the only Provinces that contribute to the following statistics in any tolerable proportion - Fotal girls' schools throughout British India in 1877-78, 2002, number of pupils, 66,615 mixed schools for boys and girls, 2955, pupils, 90,915 total amount expended on girls' schools, £, 78,729, of which £,27,000 was devoted to the 12,000 girls of Bengal The total number of girls' schools in 1882-83 in British India was 3487, at tended by 162,317 pupils This branch of instruction will now, it is hoped, receive a further development from the recom mendations of the Education Commission

In 1877-78, the normal, technical, and industrial schools Normal numbered 155, with a total of 6864 students, the total expecial penditure was £54,260, or an average of under £8 per schools student In 1882-83, the number of these special institutions was 213, attended by 8078 students Total expenditure in 1882-83, f 98 571, or an average of over f 12 per head Schoolmistresses, as well as schoolmisters, are trained, and here also the missionaries have shown themselves active in anticipating a work which Government subsequently took up

Of schools of art, the oldest is that founded by Dr Schools of A Hunter at Madras in 1850, and taken in charge by the Ait Education Department in 1856 This institution, and the Art Schools at Calcutta and Bombay, founded on its model, have been successful in developing the industrial capacities of the students, and in training workmen for public employment. Their effect on native art is more doubtful, and in some cases they have tended to supersede native designs by hybrid European Muscums have been established at the Provincial capitals and in other large towns

Schools for Europeans have also attracted the attention of Schools Government Foremost among special schools are the asylums for Lure in the hills for the orphans of British soldiers (eg Utakamand and Sanawar), founded in memory of Sir Henry Lawrence

Vernacular piess

Closely connected with the subject of education is the steady growth of the vernacular press, which is ever active in assuing both newspapers and books. The missionaries were the first to cast type in the vernacular languages, and to Firstnews- employ native compositors The earliest vernacular newspaper was issued in Bengali by the Baptist Mission at Serampur, in For many years the vernacular press preserved the marks of its origin, being limited almost exclusively to theological controversy. The missionaries were encountered with their own weapons by the Theistic sect of the Brahma Samái, and also by the orthodox Hindus So late as 1850, most of the vernacular newspapers were still religious or sectarian rather than political But during the last twenty-five years,

the vernacular press has gradually usen into a powerful engine

The theo logical period

paper

The politi

cal period

of political discussion

Statistics of native journali-m

The number of newspapers published in the several ver naculars is estimated at 250 to 300, and their aggregate sale at over 250,000 copies 1 But the circulation proper, that is, the actual number of readers, is very much larger Bengal, the vernacular press suffers from the competition of English newspapers, some of which are entirely owned and written by natives In the North Western Provinces and Punjab. from Lucknow to Lahore, about 100 newspapers are printed in Hindustani or Urdu, the vernacular of the Muhammadans throughout India Many of them are conducted with considerable ability and enterprise, and may fairly be described as representative of native opinion in the large towns. The Bombay journals are about equally divided between Marathi and Gujaratí Those in the Marathi language are characterized by the traditional independence of the race of Sivan, the Gujarati newspapers are the organs of the Parsis, and of the trading community generally I he vernicular newspapers of Madras, printed in Tamil and Telugu, are politically unim portant, being still for the most part devoted to religion

Boc I s

As regards books, or rather registered publications, in the vernacular languages, Lower Bengal takes the lead, the Punjab, Bombay, the North Western Provinces, and Madras follow in order. In a previous chapter, the exact number of works published in the native languages of India in the various

<sup>1</sup> The above estimate must be regarded as the result of intelligent inquiry, and not as an actual enumeration. Steps are now (1885) being taken to mocure accurate returns of the vernacular press. But the ephemeral existence of many native newspapers, and other features of vernacular journalism, render the undertaking not free from difficulty

departments of literature, has been stated 1 The following figures refer to the years 1878 and 1882-83, and comprise the whole registered publications, both in the native languages and in English There is probably a considerable number of minor works which escape registration

Total of registered publications in 1878, 4913 Of these, 576 Book were in English or European languages, 3148 in vernacular statistics, dialects of India, 516 in the classical languages of India, and 673 were bi lingual, or in more than one language than 2495 of them were original works, 2078 were republications, and 340 were translations Religion engrossed 1502 of the total, poetry and the drama, 779, fiction, 182, natural science, 249, besides 43 works on philosophy or moral science Language or grammar was the subject of 612, and law of no fewer than 249 separate works History had only 96 books devoted to it, biography, 22, politics, 7, and travels or voyages, 2 These latter numbers, contrasted with the 1502 books on religion, indicate the working of the Indian mind

In 1882-83, the registered publications numbered 6198, of Book which 655 were in English or European languages, 4208 in statistics, vernacular dialects of India, 626 in the classical languages of India, and 700 bi lingual or in more than one language the total number of published works in 1882-83, 1160 were returned as educational, and 5038 as non-educational works Original works numbered 3146, re-publications, 2547, and translations, 505 Publications relating to religion numbered 1641, poetry and the drama, 1089, fiction, 238, natural and mathematical science, 281, philosophy and moral science, 160, history, 143, languages, 784, law, 338, and medicine, 235 Politics were represented in 1882-83 by only 11 publications, travels and voyages by only 4, while works classed as miscellaneous numbered 1231

1 Aute, chap w

2 H

### CHAPTER XVII

### AGRICULTURE AND PRODUCTS

Agricul ture

THE cultivation of the soil forms the occupation of the Indian people in a sense which it is difficult to realize in England As the land-tax forms the mainstay of the imperial revenue, so the rajat or cultivator constitutes the unit of the social system. The village community contains many members besides the cultivator, but they all exist for his benefit, and all are maintained from the produce of the village fields Even in considerable towns, the traders and handicraftsmen frequently possess plots of land of their own. on which they raise sufficient grain to supply their families with food According to the returns of the general Census of 1872, the adult males directly engaged in agriculture amount to nearly 35 millions, or 56 2 per cent of the total these must be added almost all the day-labourers, who number 71 million males, or 123 per cent., thus raising the total of persons directly supported by cultivation to 68 5 per cent, being more than two thirds of the whole adult males The Census of 1881 returned a total of 51,274,586 males as engaged in agriculture throughout British and Feudatory India Adding to these 71 million of adult day labourers, there is a total of upwards of 581 million persons directly supported by cultivation, or 72 per cent of the whole male population engaged in some specified occupation 1. The number of persons indirectly connected with agriculture is also very great The Famine Commissioners estimate that go per cent of the rural population live more or less by the tillage of the soil India is, therefore, almost exclusively a country of peasant farmers

The work of almost the whole people

<sup>1</sup> For reasons fully explained in the *Note on Indian Statistics* in the last chapter, the years ordinarily sciented for population statements are the Census years 1872 and 1881, and for other details, 1877-78 and 1882-83. The last year for which the final Parliamentary presentment of Indian returns had been received by the author when these sheets went to press in the summer of 1885, ended on 31st March 1883.

The increase in the population has, however, developed a Landless large landless class. The cultivated area no longer suffices to class allow a plot of land for each peasant, and multitudes now find themselves ousted from the soil. They earn a poor livelihood as day-labourers, and according to the Census of 1881, comprise 7,248,491, or one-eighth of the entire adult male population. There is still enough land in India for the whole people, but the Indian peasant clings to his native. District, however overcrowded. Migration or emigration has hitherto worked on too small a scale to afford a solution of the difficulty.

Agriculture is carried on in the different Provinces with an Various infinite variety of detail Everywhere the same perpetual systems assiduity is found, but the inherited experience of generations culture has taught the cultivators to adapt their simple methods to differing circumstances The deltaic swamps of Bengal and Burma, the dry uplands of the Karnátik, the black-soil plains of the Deccan, the strong clays of the Punjab, the desert sand of Sind or Rajputana, require their separate modes of cultivation In each case the Indian peasant has learned, without scientific instruction, to grow the crops best suited to the soil. His light plough, which he may be seen carrying a field on his shoulders, makes but superficial scratches, but what the furrows lack in depth, they gain by repetition, and in the end pulverize every particle of mould Where irrigation Irrigation is necessary, native ingenuity has devised the means, although in this as in other matters connected with agriculture, a wide field remains for further development and improvement inundation channels in Sind, the wells in the Punjab and the Deccan, the tanks in the Karnatik, the terraces cut on every hillside, water at the present day a far larger area than is commanded by Government canals Manure is copiously applied Manure to the more valuable crops, whenever manure is available, its use being limited only by poverty and not by ignorance The scientific rotation of crops is not adopted as a prin-Rotation ciple of cultivation But in practice it is well known that a of crops succession of exhausting crops cannot be taken in consecutive seasons from the same field, and the advantage of fallows is widely recognised A mutation of crops takes the place of their rotation

The petite culture of Indian husbandmen is in many respects well adapted to the soil, the climate, and the social conditions of the people The periodicity of the seasons usually allows of two, and in some places of three, harvests in the year For

mexhaustible fertility, and for retentiveness of moisture in a dry season, no soil in the world can surpass the regar or 'black cotton-soil' of the Deccan In the broad river basins, the floods annually deposit a fresh top-dressing of silt, thus superseding the necessity of manures The burning sun and the heavy rains of the tropics combine, as in a natural forcinghouse, to extract the utmost from the soil A subsequent section will deal with possible improvements in Indian agriculture - improvements now necessary in order to support the increasing population As the means of communication improve and blunt the edge of local scarcity, India is probably destined to compete with America as the granary of Great Britain

Rice

The name of rice has from time immemorial been closely associated with Indian agriculture The rice-eating population is estimated at 67 millions, or over one-third of the whole 1 If, however, we except the deltas of the great rivers, and the long strip of land fringing the coast, rice may be called a rare crop throughout the remainder of the peninsula But where rice is grown, it is in an almost exclusive sense the staple crop

Statistics of rice cultivation

In British Burma, out of a total cultivated area of 2,833,520 acres, in 1877-78, as many as 2,554,853 acres, or 90 per in different cent, were under rice. In 1882-83, the cultivated area in Provinces British Burma had risen to 3 746,279 acres, of which 3,380,096 acres, or 90 per cent, were under rice Independent Burma, on the other hand, grows no rice, but imports largely from British territory For Bengal, unfortunately, no general But taking Rangpur as a typical statistics are available District, it was there found that 11 million acres, out of 2 classified total of a little more than 13 million acres, or 88 per cent, were devoted to rice Similar proportions hold good for the Province of Orissa, the deltas of the Godavari, Kistna. and Kaveri (Cauvery), and the lowlands of Iravancori, Malabar, Kánara, and the Konkan Throughout the interior of the country, except in Assam, which is agriculturally a continuation of the Bengal delta, the cultivation of rice occupies but a subordinate place. In the North-Western Provinces and Oudh, rice is grown in damp localities, or with the help of irrigation, and forms a favourite food for the upper classes, but the local supply requires to be supplemented by importation from Bengal In Madras generally, the area under rice in 1883 amounted to about 43 per cent of the whole food

<sup>1</sup> Keport of the Indian Famine Commission, part ii 81 (1880)

grain area. In Bombay proper, the corresponding proportion is only 14 per cent, and in the outlying Province of Sind, 17 per cent In the Central Provinces, the proportion rises as high as 55 per cent, but in the Punjib it falls to 3 per cent In scarcely any of the Native States, which cover the centre of the peninsula, is rice grown to a large extent.

Rice is in fact a local crop, which can only be cultivated Method of profitably under exceptional circumstances, although under vation those circumstances it returns a larger pecuniary yield than any other food grain in India According to the Madras system in Madras, of classification, rice is a 'wet crop,' ie it demands steady irrigation In a few favoured tracts, the requisite irrigation is supplied by local rainfall, but more commonly by the periodical overflow of the rivers, either directly or indirectly through artificial channels It has been estimated that rice requires 36 to 40 inches of water in order to reach its full development But more important than the total amount of water, is the period over which that amount is distributed. While the seedlings are in an early stage of growth, 2 inches of water are ample, but when the stem is strong, high floods are almost unable to drown it In some Districts of Bengal, a longstemmed variety of rice is grown, which will keep its head above 12 feet of water

Throughout Bengal, there are two main harvests of rice in in Bengal the year—(1) the aus or early crop, sown on comparatively high lands, during the spring showers, and reaped between July and September, (2) the aman or winter crop, sown in low-lying lands, from June to August, usually transplanted, and reaped from November to January The latter crop comprises the finer varieties, but the former is chiefly retained by the cultivators for their own food supply Besides these two great rice harvests of the Bengal verr, there are several intermediate ones in different localities The returns from Rangpur District specify no fewer than 295 distinct varieties of rice 1 The average out-turn per acre in Bengal has been estimated at 15 maunds, or 1200 lbs, of cleaned rice 1877-78, when famine was raging in Southern India, the exports of rice from Calcutta (much of it to Madras) amounted to nearly 17 million cwts

In British Burma, there is but a single harvest in the in Burma year, corresponding to the aman of Bengal The grain

<sup>1</sup> See Hunter's Statistical Account of Bingal, vol vu pp 234-237 (1876)

is reddish in colour, and of a coarse quality, but the average out-turn is much higher than in Bengal, reaching in some places an average of 2000 and 2500 lbs per acre In 1877-78, the Burmese export of rice exceeded 13 million cwts, and in 1882-83 it exceeded 211 million cwts., of an estimated aggre gate value of over 51 millions sterling

Hill culti vation

Besides being practically the sole crop grown in the deltaic swamps, rice is also cultivated on all the hills of India, from Coorg to the Himálayas The hill tribes practise one of two methods of cultivation They either cut the mountain slopes into terraces, to which sufficient water is conveyed by an ingenious system of petty canals, or they trust to the abundant rainfall, and scatter their seeds on clearings formed by burning patches of the jungle. In both cases, rice is the staple crop, wherever the moisture permits figures largely in the nomadic system of hill cultivation

Areaunder rice

The tables on the next page show the comparative area under rice and the two great other classes of food grains for all India But the figures must be taken as only approximate estimates

Wheat.

cultiva

tion

Statistics of wheat

Recent exports of wheat to Europe have drawn attention to the important place which this crop occupies in Indian It is grown to some extent in almost every Disrict But, broadly speaking, it may be said that wheat does not thrive where rice does, nor, indeed, anywhere south of The great wheat growing tracts of India are in the Deccan The North-Western Provinces in 1883 had 97 per the north cent of the food-grain area under wheat, barley, and millets, and about 57 per cent under wheat alone. In the Puniab. the proportion of wheat and barley is 61 per cent Wheat is also largely grown in Behar, and to a less extent in the western Districts of Bengal In the Central Provinces, wheat covers a large proportion of the food-grain area, being the chief cereal in the Districts of Hoshangabad Narsinghpur, and Sagar In Bombay, the corresponding proportion was only 15 per cent, and in Sind, 12 per cent. The wheat returns vary from year to year, but disclose a tendency upwards significance may be learned from the fact, that in Great Britain the area under wheat is only 3 million acres, or less than one-half the amount in a single Indian Province, the Punjab It has been estimated that the total area under wheat in India is equal to the total area under the same crop in the United States

Out turn of wheat Nor is the out-turn contemptible, averaging about 13 bushels Scatence continued on page 488

## RATIO OF AREA UNDER THE THREE PRINCIPAL CLASSES OF INDIAN FOOD-GRAINS

T 1878

Province	Ratio of	Area under Food Grain	principal	Total Population	Popu lation
11071100	Wheat or Barley	Millets	Rice	(British India)	eating Rice
Punjab North Western Provinces Bengal and Assam Central Provinces, Berar, Bonibay Madras Mysore	Per cent 54 57 No 27 17 a a a	Per cent 41 34 figures avai 39 82 83 67	Per cent   5 9   1able   34 1 10 33 16	Millions 183 44 74 93 23 163 31 4	Millions  1 4 46 3 a 2 10

II 1883

Ratio of Area under princ pal Total Food Grains Popu Population lation Province (British eating India) Rice Wheat or Rice Millets Barley Per cent Per cent | Per cent Millions Villions 61 36 184 Punjab, North Western Provinces, 97 'n 4 No figure available 69‡ Bengal, 43 41 3 Assam, а a 50 Central Provinces 45 a 55 3 Berar, 97 24 a а 3 16¥ 2 Bombay, 15 71 14 Madras, 31 10 a 57 43 06

# Where a column is left blank, the separate figures are not available

4

4

Mysoic.

NB-It will be observed that in the second table, where separate figures are not available, the ratio is that which one principal class bears to the other, and not to the total food grain area of the District The figures for the second table are derived from the Local Administration Reports for 1883-84, except in the case of Berar and Mysore, for which the figures are for 1881-82 (Mysore) and 1882-83 (Berar) They are not, in all cases, strictly comparable with the figures in the first table, which were taken from the Famine Commissioners' Report

Sentence continued from page 486 ]

per acre in the Punjab, as compared with an average of  $15\frac{1}{2}$  bushels for the whole of France The quality, also, of the grain is high enough to satisfy the demands of English millers. The price of Indian wheat in Mark Lane varies considerably from year to year, the best qualities averaging somewhat lower than Australian or Californian produce. The abolition, in 1873, of the old Indian export duty on wheat, laid the foundation of the Indo-European wheat-trade, which, since this wise measure, has attained to large dimensions. The low prices of wheat in England in 1884 gave a check to the trade—a check which is believed to be temporary

Wheat cultiva According to the system of classification in Upper India, wheat ranks as a *rabi* crop, being reaped at the close of the cold weather in April and May Wherever possible, it is irrigated, and the extension of canals through the Doab has largely contributed to the substitution of wheat for inferior cereals

Millets

Taking India as a whole, it may be broadly affirmed that the staple food-grain is neither rice nor wheat, but millet Excluding special rice tracts, varieties of millet are grown more extensively than any other crop, from Madras in the south, at least as far as Raiputána in the north. The two most common kinds are great millet (Sorghum vulgare), known as joar or jawari in the languages derived from the Sanskrit, as jonna in Telugu, and as cholam in Tamil, and spiked millet (Pennisetum typhoideum), called bajra in the north and Lambu in the south In Mysore and the neighbouring Districts, ragi (Eleusine corocana), called náchani in Bombay, takes the first place According to the Madras system of classification, these millets all rank as 'dry crops,' being watered only by the local rainfall, and sown under either monsoon, farther north, they are classed with the kharif or autumn harvest, as opposed to wheat.

Chief varieties

Statistics
of millet
cultiva
tion,
in Madras.

The following statistics show the importance of millet cultivation throughout Southern and Central India. In Madras, in 1875–76, cholam covered 4,610,000 acres, ra,i, 1,636,000 acres, ruragu or auricalu (Paspalum inihaceum), 1,054,000 acres, kambu, 2,909,000 acres, samai or millet proper (Panicum frumentaceum), 1,185,000,—making a total of 11,384,000 acres under 'dry crops,' being 52 per cent of the cultivated area. The proportion was 67 per cent of the food grain area in 1879 In 1882–83, the area under millets and inferior cercal crops was returned at 10,942,384 acres. In the upland

region of Mysore, the proportion under 'dry crops,' chiefly in Mysore, rage, rises to 77 per cent of the cultivated area, or 84 per cent of the food-grain area. The total under all millets, joán, and bajra in Bombay and Sind may be taken at about 83 per cent, in the Central Provinces, 39 per cent, in the Punjab, 41 per cent, and in the North-Western Provinces, 34 per cent and other of the total food grain area. It should be remembered that Provinces these figures vary from year to year

Indian corn is cultivated to a limited extent in all parts of Minor the country, barley, in the upper valley of the Ganges, throughout the Punith, and in the Himálayan valleys, oats, only as in experimental crop by Europeans Joar and ragi, but not bajra, are valuable as fodder for cattle

Pulses of many sorts form important staples. In Madras, Pulses, the area under pulses in 1875 was 2,057,000 acres, or 9 per in 1875. cent, in Bombay, about 830,000 acres, in the Punjab 4,000,000 acres, or 21 per cent. The area under pulses in 1882-83 was returned as under.—In Madras, 1,955,946 acres, and 1883 or 8 per cent of the cultivated area, in Bombay, 1,776,773 acres, or over 8 per cent, in the Punjab, 3 664,952 acres, or 15½ per cent of the cultivated area. The principal varieties of pulses grown, with many native names, but generically known to Europeans as gram and dal, are—Cicer arietinum, Phaseolus Mungo and P radiatus, Dolichos biflorus, D sinensis and D Lablab, Cajanus indicus, Ervum Lens, Lathyrus sativus, and Pisum sativum

Oil-seeds also form an important crop in all parts of the Oil seeds, country, oil being universally required, according to native custom, for application to the person, for food, and for lumps In recent years, the cultivation of oil-seeds has received an extraordinary stimulus owing to their demand in Europe, especially in France But as they can be grown after rice, etc as second crop, this increase has hardly tended to diminish the production of food grains The four chief varieties grown are mustard or rape seed, linseed, til or gingelly (Sesamum), and castor-oil Bengal and the North-Western Provinces are at present the chief sources of supply for the foreign demand, but gingelly is largely exported from Madras, and, to a less Area in 1875 under oil seeds - In in 1875, extent, from Burma Madras, about 1,200,000 acres, or nearly 6 per cent of the cultivated area, in Bombay, 628,000 acres, in the Central Provinces, 1,358,571 acres, or nearly 9 per cent, in the Punjab, 780,000 acres, or 4 per cent Area under oil-seeds in 1882-83-In Madras, 1,063,988 acres, of 47 per cent and 1883

of the total cultivation, in Bombay, 1,336,385 acres, or 6 i per cent, in the Central Provinces, 1,600,225 acres, or 113 per cent, and in the Punjab, 1,039 633 acres, or 44 per cent of the area under cultivation. In the year 1877-78, the total export of oil-seeds from India amounted to 12,187,020 cwts, valued at £7,360,284, in 1878-79, to 7,211,790 cwts, valued at £4,682,512, and in 1882-83, to 13,147,982 cwts, valued at £7,205,924

Vege tables

Vegetables are everywhere cultivated in garden plots for household use, and also on a larger scale in the neighbourhood Among favourite native vegetables, the followof great towns ing may be mentioned —The egg-plant, called brinjal or baigan (Solanum melongena), potatoes, cabbages, cauliflower, radishes, onions, garlic, turnips, yams, and a great variety of cucurbitaceous plants, including Cucumis sativus, Cucurbita maxima, Lagenaria vulgaris, Trichosanthes dioica, and Benicasa cerifera Of these, potatoes, cabbages, and turnips are of recent intro-Almost all English vegetables can be raised by a careful gardener Potatoes thrive best on the higher elevations. such as the Khasi Hills, the Nilgiris, the Mysore uplands, and the slopes of the Himalayas, but they are also grown on the plains and even in deltaic Districts They were first introduced into the Khási Hills in 1830 They now constitute the principal crop in these and other highland tracts export from the Khásí Hills to Bengal and the Calcutta market is estimated at considerably over 7000 tons, valued at £, 50,000

Fruits

Among the cultivated fruits are the following — Mango (Mangifera indica), plantain (Musa paradisiaca), pine-apple (Ananassa sativa), pomegranate (Pun ca Granatum), guava (Psydium Guyava), tamarind (Tamarindus indica), jack (Artocarpus integrifolia), custard-apple (Anona squamosa), papaw (Carica Papaya), shaddock (Citrus decumana), and several varieties of fig, melon, orange, lime, and citron The mangoes of Bombay, of Múltán, and of Maldah in Bengal, and the oranges of the Khási Hills enjoy a high reputation, while the guavas of Madras and other Provinces make an excellent preserve

Spices

Among spices, for the preparation of curry and other hot dishes, turmeric and chillies hold the first place, and are very widely cultivated. Next in importance come ginger, coriander, aniseed, black cummin, and fenugreek. The pepper vine is confined to the Malabar coast, from Kánara to Travancore. Cardamoms are a valuable crop in the same locality, and also in the Nepálese Himálayas. The pán crecper (Piper

Betle), which furnishes the 'betel-leaf,' is grown by a special caste in most parts of the country Its cultivation requires constant care, but is highly remunerative The areca palm. which yields the 'betel-nut,' is chiefly grown in certain favoured localities, such as the deltaic Districts of Bengal, the Konkan of Bombay, and the highlands of Southern India

Besides 'betel-nut' (Areca Catechu), the palms of India Palms include the cocoa-nut (Cocos nucifera), the bastard date (Phœnix sylvestris), the palmyra (Borassus flabelliformis), and the true date (Phœnix dactylifera) The cocoa-nut, which loves a sandy soil and a moist climate, is found in greatest perfection along the strip of coast-line which fringes the southwest of the peninsula, where it ranks next to rice as the staple product. The bastard date, grown largely in the country round Calcutta, and in the north-east of the Madras Presidency, supplies both the jaggery sugar of commerce, and intoxicating liquor for local consumption Spirit is also distilled from the palmyra palm in many Districts, especially in the Bombay Presidency and in the south of Madras The true date is almost confined to Sind

Sugar is manufactured both from the sugar-cane and from Sugar the bastard date-palm The best cane is grown in the North-Western Provinces, on irrigated land It is an expensive crop. requiring much attention, and not yielding a return within the year The profits are proportionately large In Bengal, the manufacture from the cane has declined during the present century, but in Jessor District, the making of date-sugar is a thriving and popular industry 1 The preparation of sugar is almost everywhere in the hands of natives, the exceptions being a few large concerns, such as the Aska factory in the Madras District of Ganjam, the Cossipur factory in the suburbs of Calcutta, the Rosa factor, at Shahjahanpur, and the Ashta gram factory in Mysore These factories use sugar-cane instead of the date juice, and have received honourable notice at exhibitions in Europe

Cotton holds a most important place among Indian agricul Cotton tural products From the earliest times, cotton has been grown in sufficient quantities to meet the local demand, and in the last century there was some slight export from the country, which was carefully fostered by the East India But the present importance of the crop dates The Company from the crisis in Lancashire caused by the American War American War, 1862

1 A full account of the manufacture will be found in Hunter's Statistical Account of Ren, al, vol n pp 280-298

Prior to 1860, the exports of raw cotton from India used to average less than 3 millions sterling a year, but after that year they rose by leaps, until in 1866 they reached the enormous total of 37 millions. Then came the crash, caused by the restoration of peace in the United Sates, and the exports steadily fell to just under 8 millions in 1879. Since then the trade has recovered, and the total value of raw cotton exports in 1882-83 amounted to 16 millions sterling. The fact is that Indian cotton has a short staple, and is inferior to American cotton for spinning the finer qualities of yarn. But while the cotton famine was at its height, the cultivators were intelligent enough to make the most of their opportunity. The area under cotton increased enormously, and the growers managed to retain in their own hands a fair share of the profit

Cotton Districts The principal cotton-growing tracts are—the plains of Gujarát and Kathiawár, whence Indian cotton has received in the Liverpool market the historic names of Surat and Dholera, the highlands of the Deccan, and the deep valleys of the Central Provinces and Berar. The best native varieties are found in the Central Provinces and Berar passing under the trade names of Hinganghat and Amrioti. These varieties have been successfully introduced into the Bombay District of Khandesh. Experiments with seed from New Orleans have been conducted for several years past on the Government farms in many parts of India. But it cannot be said that they have resulted in success except in the Bombay District of Dharwár, where exotic cotton has now generally supplanted the indigenous staple.

Cotton area in Bombay,

ın 1876.

In 1875-76, the area under cotton in the Bombay Presidency, including Sind and the Native States, amounted to 4,516,587 acres, with a yield of 2,142,835 cwts Of this total, 583,854 acres, or 13 per cent, were sown with exotic cotton, including seed procured from the Central Provinces and also from New Orleans, with a yield of 248,767 cwts The average yield was about 53 lbs per acre, the highest being in Sind and Gujarat (Guzerát), and the lowest in the Southern Marátha country In 1875-76, the total exports were 3,887,808 cwts, from the Bombay Presidency, including the produce of the Central Provinces and the Berars, valued at £10,673,761 In 1882-83, the total area under cotton in the Bombay Presidency, including Sind and the Native States, was 5,698,862 acres, yielding 3,141,421 cwts of cleaned cotton area 796,608 acres were sown with exotic cotton, yielding an out-turn of 420,494 cwts The exports of raw cotton from

na 1883

Bombay and Sind in 1882-83, including the produce of the Central Provinces and Berar, were 4,996,739 cwts, valued at £13,134,693, besides cotton twist and yarn and manufactured piece goods to the value of £2,183,205

In 1877-78, the area under cotton in the Central Provinces Cotton was 837,083 acres, or under 6 per cent of the total culti-cultivation in Central vated area, chiefly in the Districts of Nágpur, Wardhá, and Province, The average yield was about 50 lbs per acre 1878 The exports from the Central Provinces to Bombay, including re-exports from Berar, were about 300,000 cwts valued at £,672,000 In 1877-78, the area under cotton in Berar In Berr was 2,078,273 acres, or 32 per cent of the total cultivated area, chiefly in the two Districts of Akola and Amráoti average yield was as high as 67 lbs of cleaned cotton per The total export was valued at £2,354,946, almost entirely railway-borne In 1882-83, the area under cotton in 1883 the Central Provinces had decreased to 612,687 acres, or 4 per cent of the then cultivated area In the same year. the area under cotton in Berar was 2,139,188 acres, or 32 per cent of the cultivated area

In Madras, the average area under cotton is about In Madias. 1,500,000 acres, chiefly in the upland Districts of Bellary and Karnúl, and the low plains of Kistna and Tinnevelli The total exports in 1876-77 were 460,000 cwts, valued at about 1 million sterling In 1882-83, cotton was grown on 1,456,423 acres in Madras In the same year, the total value of the cotton exports from Madras, raw and manufactured, was £1.898.351 In Lower Bengal the cultivation of in Bengal, cotton seems on the decline The local demand has to be met by imports from the North-Western Provinces and the bordering hill tracts, where a short-stapled variety of cotton is extensively The total area under cotton in Lower Bengal is estimated at only 162,000 acres, yielding 138,000 cwts of cleaned cotton Of this, 31,000 acres are in Saran, 28,000 in the Chittagong Hill Tracts, and 20,000 in Cuttack Throughout in the NW Pro the North-Western Provinces, and also in the Punjab, sufficient vinces and cotton is grown to meet the wants of the village weavers

The total export of raw cotton from Indian ports in 1878-79 Total was 2,966,569 cwts, valued at £7,914 091, besides cotton cotton twist and yarn to the value of £937,698, and cotton manu factures valued at £1,644,125 By 1882-83 the exports of 1878 and raw cotton from all Indian ports had increased to 6,170,173 1883 cwts, valued at £16,055,758, besides cotton twist and yarn to the value of £1,874,464, and cotton manufactures valued

at £2,093,146 Total value of cotton exports in 1882-83, raw and manufactured, £20,023,368

Cotton cleaning

1877,

and 1883

The cotton mills of Bombay will be treated of in the next chapter under 'Manufactures' But apart from weaving and spinning, the cotton trade has given birth to other industries, for cleaning the fibre and pressing it into bales for carriage In 1876-77, there were altogether 2506 steam gins for cleaning cotton in the Bombay Presidency, besides 22 in the Native States In addition, there were 130 full-presses worked by steam power, and 183 half-presses worked by In 1882-83, there were altogether 2787 steam manual labour gins for cleaning cotton in the Bombay Presidency, 96 steam cotton presses, and 141 cotton presses worked by manual labour The total amount of capital invested in the cotton industry in the Bombay Presidency is estimated at about £900,000 Cotton gins and presses are also numerous at the chief marts in the North-Western and Central Provinces, and Berar

Iute

The jute area of

Bengal.

Jute ranks next to cotton as a fibre crop I he extension of its cultivation has been equally rapid, but it is more limited in area, being practically confined to Northern and Eastern Bengal. In this tract, which extends from Purniah to Goalpará for the most part north of the Ganges and along both banks of the Brahmaputra, jute is grown on almost every variety of soil. The chief characteristic of the cultivation is that it remains entirely under the control of the cultivator Practically a peasant proprietor, he increases or diminishes his cultivation according to the state of the market, and keeps the profits in his own hands. The demand for jute in Europe has contributed more than any administrative measure to raise the standard of comfort throughout Eastern Bengal.

The jute plant

The plant that yields the jute of commerce is called pat or koshta by the natives, and belongs to the family of mallows (Corchorus olitorius and C capsularis). It sometimes attains a height of 12 feet. The seed is generally sown in April, the favourite soil being chars, or alluvial sandbanks thrown up by the great rivers, and the plant is ready for cutting in August. When it first rises above the ground, too much water will drown it, but at a later stage, it survives heavy floods. After being cut, the stalks are tied up in bundles, and thrown into standing water to steep. When rotted to such a degree that the outer coat peels off easily, the bundles are taken out of the water, and the fibre is extracted and carefully washed. It now appears as a long, soft, and silky thread, and all that remains to do is to make it up into bales for export. The

Preparation of fibre

final process of pressing is performed in steam-presses at the Mechan central river marts, principally at Howrah or in the outskirts ism of jute of Calcutta. The trade is to a great extent in the hands of trade natives Bepáris or travelling hucksters go round in boats to all the little river marts, to which the jute has been brought by the cultivators By their agency the produce is conveyed to a few great centres of trade, such as Siráigani and Náraingani, where it is transferred to wholesale merchants, who ship it to Calcutta by steamer or large native boats, according to the urgency of demand

In 1872-73, when speculation was briskest, it is estimated Jute out that about 1 million acres were under jute, distributed over 16 turn and exports, Districts, which had a total cultivable area of 23 million acres 1873, The total export from Calcutta in that year was about 7 million cwts, valued at £3,112,548 In 1878-79, the total 1878, export of raw jute from India was 6,021,382 cwts, valued at £3,800,426, besides jute manufactures to the value of £,1,098,434 In 1882-83 the total exports of raw jute from 1883 Indian ports amounted to 10,348,909 cwts, of the value of £5,846 926, besides jute manufactures, principally in the shape of gunny-bags, of the aggregate value of £1,487,831 The total number of steam jute mills in Bengal, either private property or owned by joint-stock companies, in 1882-83 was 18, affording employment to 41,263 persons

Jute is an exhausting crop to soils without river inundation. Aspects to This fact is well known to the cultivators who generally the husbandman allow jute fields to lie fallow every third or fourth year fear has sometimes been expressed that the profits derived from jute may have induced the peasantry to neglect their grain But the apprehension seems to be groundless the most part, jute is grown on flooded lands which would otherwise often lie untilled It only covers a very small portion of the total area, even of the jute Districts, say 4 per cent, and the fertility of the rice fields of Eastern Bengal is such that they could support a much denser population than at present Jute, in short, is not a rival of rice, but a subsidiary crop, from which the cultivator makes a certain additional income in hard cash

Indigo is one of the oldest, and, until the introduction of tea- Indigo planting, ranked as the most important, of the Indian staples grown by European capital In Bengal proper, its cultivation Its decline has greatly declined since the first half of this century in Lower English indigo planters have forsaken the Districts of Hugh, the Twenty-four Parganas, Dacca, Faridpur, Rangpur, and

Indigo

Pabna, now dotted with the sites of ruined old factories Nadıyá, Jessor, Murshidábad, and Maldah, the industry is still carried on, but it has not recovered from the depression and actual damage caused by the indigo riots of 1860, and the emancipation of the persantry by the Land Act of 1859 Indigo of a superior quality is manufactured in Midnapur, along the frontier of the hill tracts

Its culti vation in Behar

The cultivation on the old scale still flourishes in Behar. from which is derived one-half of the total exports from Complete statistics of area are not available, as there are many small indigo concerns throughout the country in native hands. Some years ago, it was estimated that in Tirhut alone there were 56 principal concerns, with 70 out works, producing annually about 20,000 maunds of dye, in Saran, 30 principal concerns and 25 outworks, producing about 12,000 maunds, in Champaran, 7 large concerns, producing also 12,000 maunds 1 The Behar Indigo Planters' Association, the responsible mouthpiece of the Behar indigo interest. has at present (1885) 73 factories belonging to the Association in the Indigo Districts of Behar Under these head factories there are 220 out-factories, most of them in charge of European assistants. The area under indigo cultivation in the above concerns is approximately 250,000 acres, giving employment to 75,900 persons, exclusive of a large staff (Native and European) for management and supervision The estimated outlay, at the rate of a little over £3 per acre, is about £750,000 annually spent in the Districts 2 It has been estimated that the total amount of money annually distributed by the planters of Behar cannot be less than I million sterling Across the border of Bengal, in the North Western Provinces,

 $m \times M$ 

Province, indigo is grown and manufactured to a considerable extent by native cultivators In the Punjab, also, indigo is an important native crop, especially in the Districts of Multan, Muzaffargarh, in Madras and Dera Ghází Khán In Madras, the total area under indigo is about 300,000 acres, grown and manufactured entirely by the natives, chiefly in the north-east of the Presidency, extending along the coast from Kistna to South Arcot, and inland to Karnul and Cuddapah

The factory maund of indigo weighs 74 lbs 10 oz

The author takes this opportunity of thanking Mi L Macnaghten, Officiating Secretary to the Behar Indigo Planters' Association, for the force going figures, and for other valuable materials, referring to as late a period as June 1885. They have, as far as possible, been incorporated in passing tiese pages through the press

In 1877-78, the total export of indigo from all India was Indigo 120,605 cwts, valued at £3,494,334, in 1878-79, 105,051 exports cwts, valued at £2,960,463 In 1882-83, the export of indigo was 141,041 cwts, of the value of  $\pm$ ,3,912,997

In Bengal, indigo is usually grown on low-lying lands, with System of sandy soil, and liable to annual inundation, in Behar, on plusting comparatively high land A common practice is for the planter to obtain from the zamındar or landlord a lease of the whole village area for a term of years, and then to require the ráyats or cultivators to grow indigo on a certain portion of their farms every year, under a system of advances seed, of which an excellent kind comes from Cawnpur, is generally sown about March, and the crop is ready for gathering by the beginning of July A second crop is sometimes obtained in September When cut, the leaves are taken to the factory, to be steeped in large vats for about ten hours until the process of fermentation is completed. The water is then run off into a second vat, and subjected to a brisk beating, the effect of which is to separate the particles of dye and cause them to settle at the bottom Finally, the sediment is boiled, strained, and made up into cakes for the Calcutta market In recent years, steam has been introduced into the factories for two purposes to maintain an equable temperature in the vats while the preliminary process of fermentation is going on, and to supersede by machinery the manual labour of beating

In the middle of the present century, the abuses connected Indigo with indigo planting became a serious problem for the Indian planting Legislature In some Districts, particularly in Lower Bengal, in the neighbourhood of Calcutta indigo planting was worked by a system of advances to the cultivators which plunged them into a state of hopeless hereditary indebtedness to the planters The Land I aw of 1850 (Act x), by defining and improving the legal status of the cultivator throughout Bengal, gave a death blow to this system in Districts in which it had been abused The results on indigo planting in several Districts around Calcutta have been described in a previous paragraph

The system pursued in Behar had, from an early period, in Behar been different. Instead of compelling the cultivator to give up his best lands to indigo by the pressure of hereditary indebtedness, the Behar planters to a large extent obtained lands of their own on lease, or by purchase, and cultivated at their own risk, or by hired labour This system has, however, its own complications, and for a time gave rise to strained relations between the planters, the native landholders, and the tenants.

Behar Indigo Planters' Associa tion

In 1877, the Government of Bengal expressed dissatisfaction at the condition of the Indigo Districts of Behar, and proposed to issue a Commission of Inquiry A responsible Association was, however, formed by the planters themselves, in communication with the Bengal Government, to readjust, as far as necessary, the relations between the planters, native landholders, and cultivators The Association thus formed has been productive of much good, both by preventing the occurrence of disputes, and by arbitrating between the parties In 1881, the Lieutenant-Governor of when disputes arise Bengal publicly thanked the Association for its 'most cordial and loyal co-operation in correcting the abuses which he had occasion to mention in 1877' The Annual Reports from the District Officers since that year have been satisfactory During 1884, the Secretary to the Association stated that every dispute referred to the Association had been amicably The relations between capital and labour and land in overcrowded tracts, almost entirely dependent on the local crops raised, are, however, always apt to be strained

Opium,

The opium of commerce is grown and manufactured in two special tracts (1) the valley of the Ganges round Patna and Benares, and (2) a fertile table-land in Central India, corresponding to the old kingdom of Malwa, for the most part still under the rule of native chiefs, among whom Sindhia and Holkar rank In Malwa, the cultivation of poppy is free, and the duty is levied as the opium passes through the British Presidency of Bombay, in Bengal, the cultivation is a Government monopoly Opium is also grown for local consumption throughout Raiputana, and to a very limited extent in the Puniah and the Central Provinces Throughout the rest of India it is absolutely prohibited In the Ganges valley, the cultivation is supervised from two agencies, with their head-quarters at Patná and Ghazípur, at which two towns alone the manufacture

Malwa ın Raj putana

and

ın Bengal

**Bengal** out turn. is conducted

In the year 1872, the Bengal area under poppy was 560,000 acres, the number of chests of opium sold was 42,675, the sum realized was £6,067,701, giving a net revenue of £,4,259,376The whole of this was exported from Calcutta to China and the Straits Settlements 1882-83, the number of chests of Bengal opium sold was 56,400, the sum realized was £7,103,925, the net revenue being £4,821,712 The amount of opium exported from Bombay raises the average exports of opium to about 11 or 12 inilions sterling, of which about 7 or 8 millions represents net profit to Government. In 1878-79, 91,200 chests of opium

1872,

and 1882

were exported from India, of the value of £12,993,985, of Total which £7,700,000 represented the net profit to Government out turn In 1882-83, 91,798 chests of Bengal and Malwá opium were exported, of the value of £11,481,379, of which £7,216,778 represented the net profit to Government

Under the Bengal system, annual engagements are entered Bengal into by the cultivators to sow a certain quantity of land with oplum poppy, and it is a fundamental principle that they may engage or refuse to engage, as they please. As with most other Indian industries, a pecuniary advance is made to the cultivator advances before he commences operations, to be deducted when he delivers over the opium at the subordinate agencies. He is compelled to make over his whole produce, being paid at a fixed rate, according to quality. The best soil for poppy is high land which can be easily manured and irrigated. The cultivation requires much attention throughout. From the commencement cultiva of the rains in June until October, the ground is prepared by repeated ploughing, weeding, and manuring. The seed is sown in the first fortnight of November, and several waterings are necessary before the plant reaches maturity in February.

After the plant has flowered, the first process is to remove manuface the petals, which are preserved, to be used afterwards as ture coverings for the opium-cakes. The juice is then collected during the month of March, by scarifying the capsules in the afternoon with an iron instrument, and scraping off the exudation next morning. The quality of the drug mainly depends upon the skill with which this operation is performed. In the beginning of April, the cultivators bring in their opium to the subordinate agencies, where it is examined and weighed, and the accounts are settled. The final process of preparing the drug in balls for the Chinese market is conducted at the two central agencies at Patna and Ghazipur. This generally lasts until the end of July, but the balls are not dry enough to be packed in chests until October.

Tobacco is grown in every District of India for local consumption. The soil and climite are favourable, but the quality of native cured tobacco is so inferior, as to scarcely find a market in Europe. The principal tobacco-growing tracts are Chief Rangpur and Tirhut in Bengal, Kaira in Bombay, the delta of tobacco the Godavarí, and Coimbatore and Madura Districts in Madras. The two last-mentioned Districts supply the raw material for the well-known 'Trichinopoli cheroot,' almost the only form of Indian tobacco that finds favour with Europeans, the produce of the lánkás or alluvial islands in the Godávarí is manufactured into 'Coconadas'. The tobacco of Northern Bengal is largely.

exported to British Burma, for the Burmese, who are great smokers, do not grow sufficient for their own needs. The manufacture of tobacco in Madras, Burma, and Bengal, is now making progress under European supervision, and promises to supply an important new staple in the exports of India.

Tobacco trade, 1877, In 1876-77, the total registered imports of tobacco into Calcutta from the inland Districts were 521 700 maunds, valued at £261,000, of which more than half came from the single District of Rangpur Tobacco is also grown for export in the Chittagong Hill Tracts The tobacco of Tirhut is chiefly exported towards the west The total area under tobacco in that District is estimated at 40,000 acres, the best quality being grown in pargana Saressa of the Tajpur Sub division In 1882-83, the imports of tobacco from the inland Districts into Calcutta were 650.583 maunds, of an estimated value of £540.601

Tobacco curing

and 1885

During the past ten years, a private firm, backed by Govern ment support, has been growing tobacco in Northern India and manufacturing it for the European market its operations is two abandoned stud firms, at Ghazipur in the North Western Provinces, and at Pusa in Tirhut District, Bengal. In 1878-79, about 240 acres were cultivated with tobacco, the total crop being about 160,000 lbs Five English or American curers were employed. Some of the produce was exported to England as 'cured leaf,' but the larger part was nut upon the Indian market in the form of 'manufactured smoking mixture? This mixture is in demand at regimental messes and canteens, and has also found its way to Australia The enterprise may now be said to have passed beyond the stage of experiment An essential condition of success is skilled supervision in the delicate process of tobacco curing Tobacco to the value of £128,330 was exported from India in 1878-79, and to the value of £117,156 in 1882-83

Uncer tainty of Indian crop statistics Before proceeding to crops of a special character, such as coffee, tea, and cinchona, it may be well to give a general view of the area covered by the staples of Indian agriculture. The table on the opposite page must be taken as approximate only. It represents, however, the best information available (1882–83). Its figures show various changes from the estimates in 1875, incorporated in some of the foregoing paragraphs. But it is necessary to warn the reader, that Indian agricultural returns do not always stand the test of statistical analysis. In most cases the local returns have to be accepted without the possibility of verification, alike in the preceding pages, and in this tabular statement. Steps are now being taken to secure a higher degree of trustworthiness in such returns.

APPROXIMATE AREA IN ACRES OCCUPIED BY THE PRINCIPAI CROPS IN SOME INDIAN PROVINCES IN 1877-78

# AND 1882-83

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\* No later stat stics are available for Mysore than those for 1881-82, the last year in which the State was under Britsh administration

502

Coffee

Coffee area

The cultivation of coffee is confined to Southern India, although attempts have been made to introduce the plant both into British Burma and into the Bengal District of Chittagong. The coffee tract may be described as a section of the landward slope of the Western Gháts, extending from Kanara in the north to Travancore in the extreme south. This tract includes almost the whole of Coorg, the Districts of Kadur and Hassan in Mysore, and the Nílgiri Hills enlarged by the recent annexation of the Wainad. Within the last few years, the cultivation has extended to the Shevaroy Hills in Salem District, and to the Palni Hills in Madura.

Introduc tion into India

Unlike tea, coffee was not introduced into India by European enterprise, and even to the present day its cultivation is largely conducted by natives. The Malabar coast has always enjoyed a direct commerce with Arabia, and yielded many converts to Islam. One of these converts, Bába Budan, is said to have gone on a pilgrimage to Mecca, and to have brought back with him the coffee berry, which he planted on the hill range in Mysore still called after his name. According to local tradition, this introduction of the berry happened about two centuries ago. The shrubs thus sown lived on, but the cultivation did not spread until the beginning of the present century

The State of Mysore and the Baba Budan range also witnessed the first opening of a coffee-garden by an English planter about forty-five years ago. The success of this experiment led to the extension of coffee cultivation into the neighbouring tract of Manjarábad, also in Mysore, and into the Wainád Sub-division of the Madras District of Malabar. From 1840 to 1860, the enterprise made slow progress, but since the latter date, it has spread with great rapidity along the whole line of the Western Ghats, clearing away the primeval forest, and opening a new era of prosperity to the labouring classes

Its pro 61645, 1840-60

Coffee statistics, 1878-82, arca.

The following statistics relate to the years 1878 and 1882 In 1877-78, there were under coffee—in Mysorc, 128,438 acres, almost confined to the two Districts of Hassan and Kadur, in Madras, 58,988 acres, chiefly in Malabar, the Nilgiris, and Salem, in Coorg, 45,150 acres total, 232,576 acres, exclusive of Travancore In 1881-82, the latest year for which statistics are available for Mysore, the total area under coffee cultivation in that State was 159,165 acres, in Madras (in 1882-83), 61,481 acres, and in Coorg, 48,150 acres. The average out-turn is estimated at about 5 or 6 cwts per acre of mature plant. The total Indian exports (from Madras)

Exports

in 1877-78 were 33,399,352 lbs, valued at £1,355,643, of Coffee which about one-half was consigned to the United Kingdom 1878. In 1878-79, the exports amounted to 38,336,000 lbs, valued at £1,548,481. In 1882-83, the exports amounted to to 1883 40,768,896 lbs, but the value had slightly decreased to £1,419,131. The decrease in value was mainly due to a fall in prices in London, owing to an overstocked market. Nearly two-thirds of the coffee exports in 1882-83 were to the United Kingdom, and over one-fourth to France.

Considerable judgment is required to select a suitable site Sites for for a coffee-garden, for the shrub will only thrive under special gardens, circumstances, which it is not very easy to anticipate beforehand. It is essential that the spot should be sheltered from the full force of the monsoon, and that the rainfall, though ample, should not be excessive. The most desirable elevation elevation is between 2500 and 3500 feet above sea-level. The climate must be warm and damp, conditions which are not conducive to the health of Europeans. Almost any kind of forest land will do, but the deeper the upper stratum of decomposed vegetable matter the better

The site chosen for a garden is first cleared with the axe, clearing. of jungle and undergrowth, but sufficient timber-trees should be left to furnish shade. In the month of December, the berries are sown in a nursery, which has previously been dug, manured, weeded, and watered as carefully as a garden Between June and August, the seedlings are planted out in pits dug in prepared ground at regular intervals, an operation cultivawhich demands the utmost carefulness in order that the roots tion, may not be injured In the first year, weeding only is required, in the second year, the shrubs are 'topped,' to keep them at an average height of about three feet, in the third year they commence to bear, but it is not until the seventh or eighth year that the planter is rewarded by a full crop The season for blossoming is March and April, when the entire shrub burgeons in a snowy expanse of flower, with a most delicate fragrance Gentle showers or heavy mists at this season contribute greatly to the fecundity of the blossoms

The bernes picking, are picked by hand, and collected in baskets to be 'pulped' on pulping, the spot. This operation is performed by means of a revolving iron cylinder, fixed against a breastwork at such an interval that only the 'beans' proper pass through, while the husks are rejected. The beans are then left to ferment for about twenty-four hours, when their saccharine covering is washed off

Coffee,

After drying in the sun for six or eight days, they are ready to be put in bags and despatched from the garden. But before being shipped, they have yet to be prepared for the home market. This is done at large coffee-works, to be found at the western ports and in the interior of Mysore. The berries are here 'peeled' in an iron trough by broad iron wheels, worked by steam power, and afterwards 'winnowed,' graded, and sorted for the market.

Tea

peeling

The cultivation of tea in India commenced within the memory of men still living, and the industry now surpasses even indigo as a field for European capital. Unlike coffee-planting, the enterprise owes its origin to the initiation of Government, and it was slow to attract the attention of the natives. Early travellers reported that the tea-plant was indigenous to the southern valleys of the Himalayas, but they were mistaken in the identity of the shrub, which was the Osyris nepalensis. The real tea (Thea viridis), a plant akin to the camellia, grows wild in Assam, being commonly found throughout the hill tracts between the valleys of the Brahmaputra and the Barak. It there sometimes attains the dimensions of a large tree, and from this, as well as from other indications, it has been plausibly inferred that Assam is the

real home of the plant, which was thence introduced at a

prehistoric date into China

Home of the tea plant, Assam

D scovered 1526

The discovery of the tea-plant growing wild in Assam is generally attributed to two brothers named Bruce, who brought back specimens of the plant and the seed, after the conquest of the Province from the Burmese in 1826 In January 1834, under the Governor Generalship of Lord William Bentinck, a committee was appointed 'for the purpose of submitting a plan for the introduction of tea culture into India' In the following year, plants and seed were brought from China, and widely distributed throughout the country Government itself undertook the formation of experimental plantations in Upper Assam, and in the sub-Himálayan Districts of Kumaun and Garhwal in the North-Western Provinces A party of skilled manufacturers was brought from China, and the leaf which they prepared was favourably reported upon in the London market Forthwith private speculation took up the enterprise

State ex periments, 1834-49

l'rivate Com panies, 1839-51 The Assam Tea Company, still the largest, was formed in 1839, and received from the Government an extensive grant of land, with the nurseries which had been already laid out. In Kumaun, retired members of the civil and military services came forward with equal eagerness. Many fundamental mis-

takes as to site, soil, and methods of manufacture were made in those early days, and bitter disappointment was the chief But while private enterprises languished, Government steadily persevered It retained a portion of its Assam gardens in its own hands until 1849, when the Assam Company began to emerge from their difficulties Government also carried on the business at Kumáun, under the able management of Dr Jameson, as late as 1855

The real progress of teaplanting on a great scale in Rapid Assam dates from about 1851, and was greatly assisted by the progress, promulgation of the Waste-Land Rules of 1854 By 1859 there were already 51 gardens in existence, owned by private individuals, and the enterprise had extended from its original head quarters in Lakhimpur and Sibsagar as far down the Brahmaputra as Kamrup In 1856 the tea plant was discovered wild in the District of Cachar in the Bárak valley, and Euro Cachar pean capital was at once directed to that quarter At about the same time, tea planting was introduced into the neighbourhood of the Himalayan sanitarium of Darrilling, among the Darrilling Sikkim Himalayas

The success of these undertakings engendered a wild spirit of speculation in tea companies, both in India and at home, which reached its climax in 1865. The industry Crisis of recovered but slowly from the effects of the disastrous crisis, 1865 and did not again reach a stable position until 1869 Since that date it has rapidly but steadily progressed, and has been ever opening new fields of enterprise At the head of the Bay Subse of Bengal in Chittagong District, side by side with coffee on quent history the Nilgiri Hills, on the forest-clad slopes of Chutia Nagpur, amid the low-lying jungle of the Bhutan Dwars, and even in Arakan, the energetic pioneers of tea planting have established their industry Different degrees of success may have rewarded them, but in few cases have they abandoned the struggle The market for Indian tea is practically inexhaustible. There is no reason to suppose that all the suitable localities have yet been tried, and we may look forward to the day when India will not only rival, but supersede, China in her staple product

The total exports of tea in 1877-78 from British Indian Statistics ports amounted to 331 million lbs, valued at a little over 3 of Indian tea, millions sterling During the next five years the exports 1877-78 to had risen to 58½ million lbs in 1882-83, valued at 3½ 1882-83 millions sterling The detailed figures for all India, including exports across the frontier by land, will be presently given

The progress of the tea industry in the various Provinces may best be illustrated by a review of the statistics of the production in the two years 1877-78 and 1882-83

Provincial statistics of tea, 1878

In 1877-88, the total area taken up for tea in Assam, including both the Brahmaputra and the Barak valleys, was 736,082 acres, of which 538,961 acres were fit for cultivation, Assam

Bengal

the total number of separate estates was 1718, the total outturn was 23,352,208 lbs, at the average rate of 286 lbs per acre under mature plant In Bengal, the area taken up was 62,642 acres, of which 20,462 acres were under mature plant, including 18,120 acres in the single District of Darjiling, the number of gardens was 221, the out-turn was 5,768,654 lbs, at the rate of 282 lbs per acre under mature plant In the North-Western Provinces there were, in 1876, 25 estates in the Districts of Kumaun and Garhwal, with an out-turn of 578,000 lbs, of which 350,000 lbs were sold in India to Central Asian merchants, and in 1871, 19 estates in Dehra Dun, with 2024 acres under tea, and an out-turn of In the Punjab there were, in 1878, 10,046 acres under tea, almost entirely confined to Kangra District. with an out turn of 1,113,106 lbs, or 111 lbs per acre Madras, the area under tea on the Nilgiris was 3160 acres

Provinces

N N

Punjab

Madras

the exports from the Presidency were 183,178 lbs, valued at £,19,308 In 1882-83, the area actually under cultivation in Assam

was 178,851 acres, of which 156,707 acres were under mature,

Provincial statistics of tea, 1882-83

and 22,144 acres under immature plant. Besides the area already occupied with tea, some 600,000 acres have been taken up for plantation purposes, and immense tracts yet untouched are still available. The present (1884) depressed state of the tea market, due, it is said, to over production and attention to quantity rather than to quality, has, however, for the present checked the further appropriation of land for tea The total out turn from 1017 tea estates in Assam in 1882-83 is returned at 45,472,941 lbs, of which 28,089,805 lbs were manufactured in the Brahmaputra valley or Assam proper, and 17.383,136 lbs in the Surmá valley Districts of Cachar and Sylhet. Average out-turn, 290 lbs per acre of The figures given above for 1882-83 show a mature plant

larger area under plant, and a very considerable increase in out-turn, over that of any previous year Approximate value of tea exports from Assam into Bengal, £2,232,524 In Bengal the area under tea cultivation in 1882-83 was 48,091 acres, of which 36,079 acres were under mature, and

Assam

12,012 acres under immature plant There were also 46,093 Bengal acres taken up for tea, but not actually under plant total number of plantations was 300, with an out-turn of 11,170,564 lbs, being at the rate of 309 lbs per acre of More than three-fourths of the Bengal tea mature plant come from Dárnling and Jalpaigurí Districts, on the lower slopes or submontane tracts of the Himálayas. The cultivation, however, is rapidly extending in other localities, as in Chittagong, on the east coast of the Bay of Bengal, and in the elevated plateau of Chutia Nagpur In the Punjab, out of Purjab 11,058 acres under tea in 1882-83, no fewer than 10,075 acres were in Kángra District The total out turn in 1882-83 is not returned, but may be estimated at about a million lbs In Madras, 5337 acres were under tea in 1882-83, but the Madras out-turn is not stated, although the exports amounted to 309,548 lbs, valued at £32,905

The following figures exhibit the exports of tea in 1878 and Tea In 1877-78, the total export of tea by sea from British exports, 1883 India amounted to 33,656,715 lbs, valued at £3,061,867 1882-83 the amount was 58,233,345 lbs, valued at £3,738,842 With the exception of Madras, which exported 309,548 lbs of tea in 1882, valued at £32,905, and Chittagong, at which an export trade in tea has sprung up, the whole exports of Indian tea are shipped from Calcutta The bulk of the tea goes to the United Kingdom, which absorbed 53,415,603 lbs, valued at £3,389,406, from Bengal in 1882-83 The Calcutta Tea Syndicate, established a few years ago with a view to opening new markets for Indian tea, has succeeded in establishing a firm, and it is hoped an increasing trade in tea with the Australian colonies and the United States Exports to Australia, which in 1881-82 amounted to 871,013 lbs, valued at £63,404, were forced up in 1882-83 to 2,713,268 lbs, valued at £177,167 Similarly, the exports to the United States increased from 195,686 lbs, valued at £14,675 in 1881-82, to 671,264 lbs, valued at £50,988 in 1882-83 The effect of this sudden expansion of trade, however, was to temporarily overstock the market, and shipments in some cases resulted in a loss. The trans-frontier export from the Punjab into · Central Asia has steadily decreased of late years, and in 1882-83, the exports of Indian tea across the Punjab frontier was only 488,200 lbs, valued at £29,924, as against an export of 1,217,840 lbs, valued at £,181,634, in 1877-78

Excluding the figures given for Madras, the whole of the Port of Indian tea is shipped from the port of Calcutta, and shipment

almost the whole was, till recently, sent to the United Kingdom.

Tea cultivation

Varieties

of the tea

plant

The processes of cultivation and manufacture are very similar throughout the whole of India, with the exception that in Upper India the leaf is prepared as green tea for the markets of Central Asia. Three main varieties are recognised—Assam, China, and hybrid. The first is the indigenous plant, sometimes attrining the dimensions of a tree, yielding a strong and high-priced tea, but difficult to rear. The China variety, originally imported from that country, is a short bushy shrub, yielding a comparatively weak tea and a small out turn per acre. The third variety is a true hybrid, formed by crossing the two other species. It combines the qualities of both in varying proportions, and is the kind most sought after by planters.

Seed

In all cases, the plant is raised from seed, which in size and appearance resembles the hizel-nut. The seeds are sown in carefully prepared nurseries in December and January, and at first require to be kept shaded. About April, the seedlings are sufficiently grown to be transplanted, an operation which continues into July

Si es for tea gardens

The site selected for a tea-garden should be well drained and comparatively elevated land, as it is essential that water should not lodge round the roots of the plants Assam, which may be taken as the typical tea district, the most favourite situation is the slopes of low hills, that everywhere rise above the marshy valleys. On the summit may be seen the neat bungalow of the planter, lower down the coolie lines, while the tea bushes are studded in rows with mathematical precision all round the sides. The best soil is virgin forest land, rich in the decomposed vegetable matter of ages Great pains are expended to prevent this fertile mould from being washed away by the violence of the tropical ruins. In bringing new land into condition, the jungle should be cut down in December, and burned on the spot in I chruary is then cleaned by the plough or the hoe, and marked out for the seedlings by means of stakes planted at regular intervals of about 4 feet from each other

Work of a tea garden, For the first two years, the work of the planter is to keep the young shrubs clear of weeds. Afterwards, it is necessary to prune the luxuriance of the bushes in the cold season every year. The prunings should be buried round the roots of the plant for manure. The plants begin to come into bearing in the third year, and gradually reach their maximum yield in their tenth year. The produce consist of the 'flushes'

Soil

(0......

or successive shoots of young leaves and buds, which first appear in the beginning of the rainy season. There are from five to seven full flushes in the season from March to November. The bushes are picked about every ten days by picking, women and children, who are paid by weight on bringing their baskets to the factory, when the operation of manufacture forthwith begins

The leaf is first spread out lightly on trays or mats in 'wither order that it may 'wither,' ie become limp and flaccid ing, Under favourable conditions, this result is effected in a single night, but sometimes the natural process has to be accelerated by exposure to the sun or by means of artificial heat The next operation is known as 'rolling,' performed either by the rolling, manual labour of coolies or by machinery The object of this is to twist and compress the leaf into balls, and set up fermentation The final stage is to arrest fermentation by drying, drying, which may be effected in many ways, usually by the help of machinery The entire process of manufacture after 'withering,' does not take more than about four hours and a All that now remains is to sort the tea in sieves, sorting according to size and quality, thus distinguishing the various grades from Flowery Peloe to Broken Congou, and to pack it for shipment in the well known tea chests

The introduction of the quinine-yielding cinchona into Cinchona India is a remarkable example of success rewarding the indefatigable exertions of a single man. When Mr. Clements Markham, 1860 Markham undertook the task of transporting the seedlings from South America to India in 1860, cinchona had never before been reared attificially. The experiment in arboriculture has not only been successfully conducted, but it has proved remunerative from a pecuniary point of view. A cheap febrifuge has been provided for the fever-stricken population of the Indian plains, while the surplus bark sold in Europe more than repays interest upon the capital expended. These results have been produced from an expenditure of about £100,000

The head quarters of cinchona cultivation in Southern Nilgin India are on the Nilgin Hills, where Government owns four plantations, from which seeds and plants are annually distributed to the public in large quantities, and there are already several private plantations, rivalling the Government estates in area, and understood to be very valuable properties. The varieties of cinchona most commonly cultivated Varieties are C officinalis and C succilibra, but experiments are

being conducted with C calisaya, C pubescens, C lanceolata, and C pitayensis Now that the success of the enterprise is secure, the Madras Government is curtailing its own operations. No fresh land is being taken up, but the plantations are kept free from weeds. The quinologist's department has been abolished, and the bark is sold in its raw state.

Spread of cinchona,

From the central establishment of the Government on the Nilgiris, cinchona has been introduced into the Palni Hills in Madura District, into the Wainad, and into the State of Travancore The total area under cinchona in Government and private plantations in 1882–83 was 2607 acres Plantations have also been opened by Government near Merkara in Coorg, on the Baba Budan Hills in Mysore, and in Tsit-taung (Sitang) District in British Burma Failure has attended the experiments made at Mahabaleshwar in the Bombay Presidency, and at Nongklao in the Khasi Hills, Assam

Southern India,

ın Bengal

But the success of the Government plantation at Darjfling, in Northern Bengal, rivals that of the original plantation on the Nilgiris—The area has been gradually extended, and the bark is manufactured into quinine on the spot by a Government quinologist—The species mostly grown is C succirubra, which yields a red-coloured bark, rich in its total yield of alkaloids, but comparatively poor in quinine proper—Efforts are being made to increase the cultivation of C calisaya, which yields the more valuable bark, but this species is difficult to propagate

Cinchona. Alkaloids

The febrifuge, as issued by the Bengal Government, is in the form of a white powder, containing the following alkaloids — Quinine, cinchonidine, cinchonine, quinamine, and what is known as amorphous alkaloid. It has been authoritatively described as 'a perfectly safe and efficient substitute for quinine in all cases of ordinary intermittent fever'. It has been substituted for imported quinine, in the proportion of three-fourths to one-fourth, at all the Government dispensaries, by which measure alone an economy of more than £20,000 a year has been achieved, and it is now cagerly sought after by private druggists from every part of the country

Cinchona statistics, 1877-78 The following show the out turn and financial results of the two large Government plantations in 1877-78 and in 1882-83—In 1877-78, the crop on the Nilgins gave 138,808 lbs of bark, of which 132,951 lbs were shipped to England, and the rest supplied to the Madras and Bombay medical departments. At Dárjíling, the crop in 1877-78 amounted to 344,225 lbs

of bark, which was all handed over to the quinologist, and yielded 5162 lbs of the febrifuge

In 1882-83, the four Government plantations on the Nilgiri Cinchona Hills comprised a total area of 847 acres, with 765,763 full-statistics, 1882-83 grown plants The total out-turn of bark (exclusive of stocks in hand) was 129,713 lbs The quantity shipped to the home market was 62,518 lbs, realizing £9768, while 69,327 lbs were sold locally by public auction, realizing £10,639, or an average of 3s 11d per lb The total proceeds from the Nilgiri plantations in 1882-83, including sale of seeds, plants, etc., was £20,842, expenditure, £8335, leaving a profit of £12,507 In the Government plantations in Dárilling District. the area in 1882 was 2204 acres, with 4,711,168 full grown plants The out-turn of the year, 396,980 lbs of dry bark, was the heaviest ever yielded By far the greater proportion was converted locally into cinchona febrifuge by the Government quinologist, while about 42,000 lbs of bark were forwarded to London at the request of the Secretary of State, to be there converted into various forms of febrifuge, and returned to India for trial by the Medical Department The revenue Profits of derived from the Dárjiling sales to the public, to the medical cinchona, and other departments, and from sale of seeds, plants, etc. amounted to  $f_{15,280}$  in 1882-83, the operations of the year resulting in a direct profit of £6628, equal to a dividend of 6) per cent on the capital outlay Total profit from the Nílgiri and Darilling plantations in 1882-83, £19,135

These profits, however, do not represent the whole of the Indirect In Bengal alone, the cost of an equal quantity of profits quinine would have amounted to £,40,132, while the cost of the febrifuge produced was only £6898, showing a saving of £33,234. The total saving effected since the opening of the factories up till the end of the year 1882-83, is stated to be £,235,000, or more than double the cost of the plantations Besides the Government cinchona estates, a number of private plantations have been established, covering an area of about 2500 acres, with about 27 millions of full-grown plants

Sericulture in India is a stationary, if not a declining industry Silk The large production in China, Japan, and the Mediterrancan countries controls the European markets, and on an average of years, the imports of raw silk into India exceed the exports The East India Company from the first took The Com great pains to foster the production of silk. As early as pany's early silk 1767, two years after the grant of the financial administration factories of Bengal had been conferred upon the Company, we find

Italian reelers. 1769

the Governor, Mr Verelst, personally urging the zamindárs, gathered at Murshidabad for the ceremony of the Punyá, 'to give all possible encouragement to the cultivation of mulberry' In 1769, a colony of reelers was brought from Italy to teach the system followed in the filatures at Novi The first silk prepared after the Italian method reached England in 1772. and Bengal silk soon became an important article of export Similar efforts started at Madras in 1793 were abandoned after a trial of five years The silk worm is said to have been introduced into Mysore by Tipu Sultán, and for many years continued to prosper But recently the Mysore worms have been afflicted by an epidemic, and despite the enterprise of an Italian gentleman, who imported fresh breeds from Japan, the business has dwindled to insignificance

periments, 1795

Tipu s ex

Bengal factories. 1799 1833

Bengal has always been the chief seat of mulberry cultiva When the trading operations of the Company ceased in 1833 they owned 11 head factories in that Province, each supplied by numerous filatures, to which the cultivators brought m their cocoons The annual export of raw silk from Calcutta was then about I million lbs But in those days the wearing of silk formed a large portion of the business of the factories In 1779, Rennel wrote that at Kasímbazar alone about 400,000 lbs weight of silk was consumed in the local European factories In 1802, Lord Valentia describes Jangipur as 'the greatest silk station of the Company with 600 furnaces, and giving employment to 3000 persons' Under the new Charter of 1833, the Company's silk trade and its commerce with China But it could not suddenly throw out of employwere to cease ment the numbers of people employed upon silk production. and its factories were not entirely disposed of until 1837

Silk area

When the Company abandoned the trade on its own of Bengal account, sericulture was taken up by private enterprise, and still clings to its old head-quarters. At the present time, the cultivation of the mulberry is mainly confined to the Raishahi and Bardwan Divisions of Lower Bengal 1 his branch of agriculture, together with the rearing of the silk-worms, is conducted by the peasantry themselves, who are free to follow or abandon The destination of the cocoons is twofold the business They may either be sent to small native filatures, where the silk is roughly wound, and usually consumed in the hand looms of the country, or they may be brought to the great European factories, which generally use steam machinery, and consign their produce direct to Europe

The exports vary considerably from year to year, being

determined partly by the local yield, and still more by the prices ruling in Europe The following are the returns for 1877-78 and 1882-83 In 1877-78, about  $1\frac{1}{2}$  million lbs of silk were exported, viz -Raw silk, 658,000 lbs, chasan, Silk or the outer covering of the cocoon, 823,000 lbs, the aggre-statistics, gate value was £750,439 In the same year, the imports of raw silk (chiefly received at Bombay and Rangoon) were a little over 2 million lbs, valued at £,678,069 By 1882-83. the imports of raw and manufactured silk had considerably exceeded the exports of the Indian production In that year the exports of raw silk amounted to only 665,838 lbs, valued at £596,836, besides silk manufactures valued at £306,928 On the other hand, the imports of foreign silk into British Indian ports in the same year amounted to 2,386,150 lbs, valued at £1,074,156, besides 9,671,261 yards of manufactured silk, and 2989 lbs of silk thread, valued at £977,768

The cultivation of the mulberry is chiefly carried on in the Ben-Mulberry gal Districts of Rajsháhí, Bogra, Maldah, Murshidábad, Birbhum, in Bengal Bardwan, and Midnapur No complete statistics are available. but in Rajsháhí alone the area under mulberry is estimated at 80,000 acres The mulberry grown as food for the silk worms is not the fiuit-tree with which we are familiar in England, but a comparatively small shrub Any fairly good land that does not grow rice will grow mulberry But the shrubs must be preserved from floods, and the land generally requires to be artificially raised in square plots, with broad trenches between, like a chess-board The mulberry differs from most Indian crops in being a perennial, te it will yield its harvest of leaves for several years in succession, provided that care be taken to preserve it It is planted between the months of November and January Three growths of silk worms are usually obtained in the year-in November, March, and August

Besides the silk worm proper (Bombyx mor), fed upon the Jungle mulberry, several other species of silk-yielding worms abound silks, in the jungles of India, and are utilized, and in some cases domesticated, by the natives Throughout Assam, especially, an inferior silk is produced in this way, which has from time immemorial furnished the common dress of the people These 'wild silks' are known to commerce under the generic name of tasar or tusser, but they are really the produce of (tasar) several distinct varieties of worm, fed on many different trees The worm that yields tasar silk in Chutia Nágpur has been in Bengal, identified as the caterpillar of Antherœa paphia When wild, it feeds indiscriminately upon the sál (Shorea robusta), the VOL. VI

baer (Zizyphus jujuba), and other forest trees, but in a state of semi-domestication, it is exclusively reared upon the dsan (Terminalia tomentosa), which grows conveniently in clumps. The cocoons are sometimes collected in the jungle, but more frequently bred from an earlier generation of jungle cocoons. The worms require constant attention while feeding, to protect them from crows and other birds. They give three crops in the year—in August, November, and May—of which the second is by far the most important.

in Central Provinces

ın Assam

The tasas silk-worm is also found and utilized throughout the Central Provinces, in the hills of the Bombay Presidency, and along the southern slopes of the Himalayas During the past twenty years, repeated attempts have been made to raise this industry out of its precarious condition, and to introduce tasar silk into the European market That the raw material abounds is certain, but the great difficulty is to obtain it in a state which will be acceptable to European manufacturers Native spun tasar thread is only fit for native hand-looms Assam, two distinct qualities of silk are made, the evia and mugá The former is obtained from the cocoons of Phalcena cynthia. and the worm is fed, as the native name implies, upon the leaves of the castor oil plant (Ricinus communis) This variety may be said to be entirely domesticated, being reared indoors Mugá silk is obtained from the cocoons of Saturnia assamungis The moth, which is remarkable for its size, is found wild in the jungle, but the breed is so far domesticated that cocoons are brought from one part of the Province to another, and the súm tree is artificially propagated to supply the worms with food

Lac

The collection of lac is in a somewhat similar position to The lac insect abounds on certain jungle that of tasas silk trees in every part of the country, and from time immemorial it has been collected by the wild tribes, in order to be worked up into lacquered ware But European enterprise has not yet placed the industry upon a stable and an organized basis Although lac is to be found everywhere, foreign exportation is almost entirely confined to Calcutta, which draws its supplies from the hills of Chutia Nágpur, and in a less degree from Assam and Mirzapur in the North-Western Provinces Lac is known to commerce both as a gum (shell lac) and as a In 1878, the total exports of lac of all kinds were 104,717 cuts, valued at £362,244 In 1879, the total exports were 91,985 cwts, valued at £300,072 In 1882-83, the exports of lac of all kinds was 138,844 cwts, of the value of £,699,113

Lac statistics, 1878 1883 Lac (lák) is a cellular, resinous incrustation of a deep orange Descrip colour, secreted by an insect (Coccus lacca) round the branches tion of lac of various trees, chiefly kúsúm (Schleichera trijuga), palás (Butea frondosa), pipal (Ficus religiosa), and baer (Zizyphus jujuba) The principal component is resin, forming about 60 or 70 per cent, from which is manufactured the shell-lac of Shell lac commerce Lac-dye is obtained from the small cells of the Lac dye incrustration, and is itself a portion of the body of the female insect. The entire incrustation, while still adhering to the twig, is called stick-lac In order to obtain the largest quantity Stick lac of dye, the stick-lac should be gathered before the young come out, which happens twice in the year—in January and July The dye is first extracted by repeated processes of washing and straining, while the shell lac is worked up from what remains in a hot and semi-liquid state

For all articles in which a fast colour is not required, lac dye Uses of can never compete with the cheaper and less permanent lac dye aniline dyes, while for more lasting colours, cochineal is preferred Lac-dve, however, is said to be superior even to cochineal in resisting the action of human perspiration, and it is probable that in the event of the supply of cochineal falling off, lac-dye might be used in its stead to produce the regimental scarlet It has largely replaced cochineal of late years in dyeing officers' coats, and a further extension of its use for similar purposes seems possible The chief establishment in India for manufacturing lac was for long near Dorandá, ın Lohárdagá District, Chutiá Nágpur, to which stick-lac is brought in from all the country round as far as the Central Provinces The annual out-turn is about 6000 cwts of shelllac, made from double that quantity of raw material 1877-78, this factory had for a time to cease working, owing to the depressed state of the market in Europe

The efforts of Government to improve the native methods Model of agriculture, by the establishment of model farms under skilled European supervision, have not been generally successful. In too many cases, the skilled agriculturists from Europe have been gardeners rather than farmers. In other cases, believing only in their own maxims of high cultivation—deep ploughing, subsoil drainage, manuring, and rotation of crops—they have despised the ancient rules of native experience, and have not adapted their Western learning to the circumstances of a tropical country. Nevertheless, many

valuable experiments have been made, and much information, chiefly of a negative character, has been gained

The small success attained

The Government model farms have been abandoned in Bengal, in Assam, and in the Punjab In the North-Western Provinces, the propagation of flowers, fruits, vegetables, and trees is still prosecuted (1885) In Bombay there are (or were lately) three model farms, and in the Central Provinces one, on which the common crops of the country are raised at a loss Saidápet (Sydapet) farm, near the city of Madras, is the only establishment at which experiments have been conducted on a scale and with a perseverance sufficient to yield results of This farm was started by a former Governor, Sir William Denison, in 1865, and has been for the past thirteen vears under the able management of Mr Robertson, Agricultural Reporter to the Madras Government It covered in 1884 an area of 300 acres in a ring fence, of which 130 acres were under crop, and 36 acres under timber, chiefly Important experiments have been made, of which casuarina some produced encouraging results, indicating the general direction in which improvements may be effected in the agricultural practice of the Presidency It has been proved that many of the common 'dry crops' can be profitably cultivated for fodder at all seasons of the year Those most strongly recommended are yellow cholam (Sorghum vulgare), guinea grass (Panicum jumentosum), and horse gram (Dolichus Sugar-cane and rice also yield excellent fodder. biflorus) when cut green Attention has been given to subsoil drainage, deep ploughing, the fertilizing powers of various manures, and the proper utilization of irrigation water

It is right to mention, however, that doubts are entertained as to whether the results of the experiments at the Madras Government Farm are equal to the outlay upon them [Since these pages went to press, the farming operations at Saidapet have been given up, except so far as required for the practical instruction of agricultural pupils.] A School of Agriculture has been established at Saidapet, in connection with the model farm, with subordinate branches in the Districts, so as to diffuse as widely as possible the agricultural lessons that have been already learned. At the end of 1882-83, the school was attended by 69 pupils. In 1882-83, the expenditure on the farm was returned at £1083, as against receipts amounting to £559. The expenditure on the School of Agriculture in the same year was £2484, against receipts amounting to only £33, 8s.

Sudapet Farm

To many it seems doubtful whether such experiments can Is success be made to yield profitable results The Hindu Patriot put possible? the case in very pithy words 'The native cultivators have nothing to learn so far as non-scientific agriculture is concerned, and the adoption of scientific agriculture is wholly beyond their means' If the only alternative lay between a strictly scientific and an altogether unscientific husbandry, a candid observer would have to concur in the Hindu Patriot's conclusion But the choice is not thus limited In England one little improvement takes place in one district, another small change for the better in another Strictly scientific The pro farming trebles the produce, a field which produces 730 lbs blem of improved of wheat without manure can be made to yield 2342 lbs by husbandry manure But the native of India has neither the capital nor the knowledge required to attain this result If, therefore, the problem before him was to increase his crops threefold, even his best wishers might despair of his success. But the task before him is a much less ambitious one, namely, to gradually increase by perhaps 10 or 20 per cent the produce of his fields, and not by 300 per cent at a stroke

Wheat land in the North-Western Provinces, which now out turn gives only 840 lbs an acre, yielded 1140 lbs in the time of of crops Akbar, and would be made to produce 1800 lbs in East Norfolk The average return of food-grains in India shows about 700 lbs per acre, in England, wheat averages over 1700 lbs Mr Hume, the late Secretary to the Government of India in its Department of Agriculture, declares, that with proper manuring and proper tillage, every acre, broadly speaking, of land in the country can be made to yield 30, 50, or 70 per cent more of every kind of crop than it at present produces, and with a fully corresponding increase in the profits of cultivation'

The first impediment to better husbandry is the fewness and The three weakness of the cattle 'Over a great portion of the Empire,' impediments writes the late Secretary to the Agricultural Department in (1) Want India, 'the mass of the cattle are starved for six weeks every of cattle year The hot winds roar, every green thing has disappeared, no hot-weather forage is grown, the last year's fodder has generally been consumed in keeping the well-bullocks on their legs during the irrigation of the spiing crops, and all the husbandman can do is just to keep his poor brutes alive on the chopped leaves of the few trees and shrubs he has access to, the roots of grass and herbs that he digs out of the edges of fields, and the like In good years, he just succeeds, in

bad years, the weakly ones die of starvation But then come the rains Within the week, as though by magic, the burning sands are carpeted with rank, luscious herbage, the cattle will eat and over-eat, and millions die of one form or other of cattle disease, springing out of this starvation followed by sudden repletion with rank, juicy, immature herbage' Mr Hume estimates 'the average annual loss of cattle in India by preventable disease' at 10 million beasts, worth 71 millions He complains that, up to the time when he wrote, no real attempt had been made to bring veterinary knowledge within reach of the people, or to organize a system of village plantations which would feed their cattle through the summer The Department of Agriculture, as re-established under Lord Ripon's Government, has endeavoured to remedy these omissions, particularly in regard to the diffusion of veterinary knowledge The statistics and breeds of agricultural stock will be given on a subsequent page

(2) Wart of manure

The second impediment to improved husbandry is the want If there were more stock, there would be more manure, and the absence of firewood compels the people to use up even the droppings of their cattle for fuel such circumstances, agriculture ceases to be the manufacture of food, and becomes a mere spoliation of the soil crops, such as lucerne, guinea-grass, and the great stemmed millets, might furnish a large supply of cattle food per acre Government is considering whether their cultivation could not be promoted by reducing the irrigation rates on green fodder crops A system of village plantations would not only supply firewood, but would yield leaves and an undergrowth of fodder sufficient to tide the cattle over their six weeks' struggle for life each summer In some Districts, Government has land of its own which it could thus plant, in others, it is only a sleeping partner in the soil. In Switzerland, the occupiers of allmends, or communal lands, are, at least in some cantons, compelled by law to keep up a certain It seems a fur question whether plantations number of trees ought not in many parts of India to be made an incident of the land tenure They would go far to solve the two funda mental difficulties of Indian agriculture—the loss of cattle, and the want of manure The system of State Forestry at present pursued will be described in a subsequent section

Utiliza tion of manure Meanwhile, the natives set an increasing value on manure. The great cities are being converted from centres of disease into sources of food-supply. For a time, caste prejudices

stood in the way of utilizing the night-soil 'Five years ago,' writes the Secretary to the Poona Municipality, 'agriculturists would not touch the poudrette when prepared, and could not be induced to take it away at even a nominal charge. At present, the out-turn of manure is not enough to keep pace with the demand, and the peasants buy it up from four to six months in advance' At Amritsar, in the Punjab, 30,000 donkey-loads were sold in one year A great margin still exists for economy, both in the towns and villages, but the husbandman is becoming more alive to the utilization of every source of manure, and his prejudices are gradually giving way under the stern pressure of facts

The third impediment to improved agriculture in India is (3) Want the want of water Sir J Caird believes that if only one-third of water of the cultivated area were irrigated, India would be secure against famine An extension of irrigation would alone suffice to raise the food-supply annually by more than 11 per cent. in most years, and thus more than keep pace with the general increase of the population Since India passed to the Crown, great progress has been made in this direction. Money has been invested by millions of pounds, 200 millions of acres are now under cultivation, and in the five British Provinces which require it most, 28 per cent, of the cultivated area, or say onethird, was in 1883 artificially supplied with water Those Provinces are the Punjab, the North-West, Oudh, Sind, and Madras Looking to what has of late years been done, and to what yet remains to be done by wells and petty works with the aid of loans from the State, we may still reckon on a vast increase of food from irrigation The pecuniary and statistical aspects of irrigation will be dealt with hereafter

Having thus summarized the three impediments to improved husbandry, it may be profitable to examine in detail the three subjects immediately connected with them, namely, the Agricultural Stock of India, Forests, and Irrigation

Throughout the whole of India, excepting in Sind and the Agriculwestern Districts of the Punjab, horned cattle are the only tural beasts used for ploughing The well-known humped breed of cattle predominates everywhere, being divided into many varieties Owing partly to unfavourable conditions of climate and soil, partly to the insufficiency of grazing ground, and partly to the want of selection in breeding, the general condition of the cattle is miserably poor As cultivation advances.

Want of fodder

the area of waste land available for grazing steadily diminishes, and the prospects of the poor beasts are becoming worse rather than better. Their only hope lies in the introduction of fodder crops as a regular stage in the agricultural course.

Famous breeds. There are, however, some fine breeds which are carefully fostered. In Mysore, the amrit mahál, a breed said to have been formed by Haidar Alí for military purposes, is kept up by the local authorities. In the Madras Districts of Nellore and Karnúl, the indigenous breed has been greatly improved under the stimulus of cattle shows and prizes, founded by British officials. In the Central Provinces there is a high-class breed of trotting bullocks, in great demand for wheeled carriages. The large and handsome oxen of Gujarat (Guzerát) in Bombay, and of Hariana in the Punjab, are excellently adapted for drawing heavy loads in a sandy soil. The statistics of live stock for various Provinces of India will be given in the form of a table on p 523

Buffaloes

The worst cattle are to be found always in deltaic tracts, but here their place is to a large extent taken by buffaloes. These last are more hardy than ordinary cattle, their character being maintained by crossing the cows with wild bulls, and their milk yields the best ghi, or clarified butter. In British Burma, the returns show that the total number of buffaloes is nearly equal to that of cows and bullocks. Along the valley of the Indus, and in the sandy desert which stretches into Rajputána, cameis supersede cattle for all agricultural operations. In the Punjab, the total number of camels was 125,584 in 1883.

Camels

Horses

The breed of horses has generally deteriorated since the demand for the native strains, for military purposes, declined upon the establishment of British supremacy In Bengal proper, and in Madras, it may be broadly said that native breeds do not exist. The chief breeds in Bombay are those of the Deccan and of Kathiawar, in both of which Provinces Government maintains establishments of stallions 1ab, however, is the chief source of remounts for our Native cavalry, the total number of horses in that Province in 1883 being returned at 76,238, in addition to 33,773 ponies About the beginning of the present century, a stud department was organized by Government to breed horses for the use of the Bengal army This system was abolished as extravagant and inefficient by Lord Mayo in 1871 Remounts are now obtained in the open market, but the Government still maintains a number of stallions, including horses imported from England,

Govern ment studs. or half English bred, and high class Arabs Excellent horses are bred by the Baluchi tribes along the western frontier

Horse fairs are held yearly in the various Provinces of Horse India The principal ones in the Punjab, the part of India fairs which furnishes the main supply of the Native cavalry remounts, are at Rawalpindi, Dera Ghází Khán, Ihang, Dera Ismail Khan, and Muzaffargarh The number of horses exhibited varies greatly from year to year, but about 5000 may be expected for sale at these five fairs Prizes to the amount of about £1500 are awarded The average price of remounts for the Native cavalry has usen of late years from £17 to about £22 Horse shows are also held at Shahpur, Gujrat, Rohtak, and Jalálábad, which are ordinarily well attended and successful In recent years, much attention has been paid in the Punjab to the breeding of mules for military Mules purposes, and the value of these animals has been conspicuously proved in the course of the operations in Afghanistán In 1882-83, the Government maintained 152 donkey stallions, of which 34 were imported from Europe, 74 from Arabia, and the remainder were of various native breeds. Some of the mules bred reach the height of 15 hands The best ponies Ponies come from Burma, Manipur (the original home of the game of polo), and Bhután

The catching of wild elephants is now either a Government Elephants monopoly, or is conducted under strict Government supervision The chief source of supply is the north-east frontier, especially the range of hills running between the valleys of the Brahmaputra and the Bárak During the year 1877-78, about Numbers 260 elephants were captured in the Province of Assam, yield-caught, 1878 and  $\lim_{t \to 0} f_{0.3}$  foo to Government Of these, 170 were captured by 1883 lessees of the privilege, and go by the Government khedá department In 1882-83, the number of elephants caught was 475, yielding a Government revenue of £8573 Elephants are also captured to a smaller extent in the mountains bordering Orissa, in Mysore and Coorg, among the Western Gháts, and in Burma, for the timber trade They are used by Government for transport, and are eagerly bought up by native chiefs and landowners as objects of display The wild elephant will be treated of in the subsequent chapter on Indian zoology

Sheep and goats are commonly reared in the wilder parts Sheep and of the country for the sake of their wool Both their weight goats for the butcher and their yield of wool are exceedingly In Mysore, and at the Saidapet farm, near Madras, attempts have been made to improve the breed of sheep by

Pige

crossing with merino rams, although without much success, except at Saidapet Pigs of great size and most repulsive appearance are everywhere reared, but are eaten only by the lowest of out castes

Statistics of Live Stock

The table on the opposite page summarizes the information collected regarding live stock in those parts of India where the statistics can be obtained with some approximation to But they must be regarded as intelligent estimates rather than as verified returns

Forests

Destruc tion of jungle

The forests of India are beginning to receive their proper share of attention, both as a source of natural wealth and as a department of the administration. Up to about twentyfive years ago, the destruction of forests by timber-cutters, by charcoal-burners, and above all, by nomadic cultivation, was allowed to go on everywhere unchecked The extension of tillage was considered as the chief care of Government. and no regard was paid to the improvident waste of jungle on all sides But as the pressure of population on the soil became more dense, and the construction of railways increased the demand for fuel, the question of forest conservation forced itself into notice. It was recognised that the inheritance of future generations was being recklessly sacrificed portance of forests, as affecting the general meteorology of a country, was also being taught by bitter experience in Europe On many grounds, therefore, it became necessary to preserve what remained of the forests in India, and to repair the mischief of previous neglect, even at considerable expense

the Forest Department, 1844-67

In 1844 and 1847, the subject was actively taken up by the Growth of Governments of Bombay and Madras In 1864. Dr Brandis was appointed Inspector-General of Forests to the Government of India, and in the following year the first Forest Act passed the Legislature (No vii of 1865) The regular training of candidates for the Forest Department in the schools of France and Germany dates from 1867 In the interval which has since elapsed, sound principles of forest administration have been laid down and gradually enforced Indiscriminate timbercutting has been prohibited, the burning of the jungle by the hill tribes has been confined within bounds, large areas have been surveyed and demarcated, plantations have been laid out, and forest conservation has become a reality in India.

From a botanical point of view, the forests may be divided Sentence continued on page 524

APPROXIMATE NUMBERS OF LIVE STOCK IND OF CERTAIN AGRICULIURAL IMPLEMENTS IN SIX INDIAN PROVINCLS IN 1882-83

1	Madras.	Bomb ty and	Punjab	Central Provinces	Berar	Retush Burma
Bullocks,	3,687,782	3,344,518	-		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	198 410
,	3,453,129	2,321,728	1,121,41/	5,356,477	/mints: /	-001-6
Buffaloes,	1,483,938	1,534,053			299,064	687,360
Horses,	7,941	~	(76,238	13,335	8,746	\ \ \ \
es,	30,189	137,774	(33,773	90,514	27,426	?»°°° > _
Donkeys,	124,731	18,179	251,068	24,660	27,707	
hants,	481				4	1,685
Camels,	S		125,584	- 29	966	
Shecp and Goats,	8,941,813	3,470,692	3,864,013	828,592	404,006	25,782
	254,557		41,161	123,439	5,515	136,353
Carts,	313,528	412,751	92,855	313,637	119,562	212,380
Ploughs,	2,013,011	1.088,357	1.803,278	892,769	109,687	356,903

Sentence continued from p 522 ]

Indian timber trees

Teak

Sal

into several distinct classes, determined by varying conditions of soil, climate, and rainfall The king of Indian forest trees is the teak (Tectona grandis), which rivals the British oak as material for ship-building The home of the teak is in the Bombay Ghats, Kánara, Cochin, Travancore, and the Burmese peninsula, where it flourishes under an excessive rainfall Second to teak is the sál (Shorea robusta), which is indigenous along the lower slopes of the Himalayas from the Sutley basin east to Assam, among the hills of Central India, and in the Eastern Gháts down to the Godávari river On the Himilayas of North-Western India, the distinguishing timber-tree is the deodara (Cedrus Deodara), while on the North-Eastern Himálayan frontier its place is occupied by Pinus Kasva and other trees, such as oak and chestnut, of a temperate zone

These noble trees supply the most valuable timber, and form the chief care of the Forest Department. But they are only the aristocracy of countless species, yielding timber, firewood, and other products of value. In the south of the

peninsula, the mountain range of the Western Gháts, from

Travancore northwards into Kanara, is clothed with an in exhaustible wealth of still virgin forest. Here there are three

separate vegetations (1) An evergreen belt on the seaward

face of the mountains, where grow the stately pun (Calophyllum

inophyllum), valuable as spars for ships, the *anjalli* or wild jack (Artocarpus hirsuta), and a variety of ebony (Diospyros Ebenum) (2) A belt of mixed forest, varying from 10 to 40 miles in width, which yields teak, blackwood (Dalbergia latifolia), and Lagerstreemia microcarpa, and here and there continuous avenues of lofty bamboos (3) A dry belt, extending over the central plateau, in which the vegetation declines

in size and abundance The precious sandal-wood (Santalum

album), limited almost entirely to Mysore and Kanara, thrives best on a stony soil, with a light rainfall. In the Bombay Presidency, the chief forest areas, excluding Kanara, are to be found in the mountainous extension of the Western Ghats, known as the Sahyádri range, and in the delta of the Indus in

D dna

South Indian forests

The three forest belts

Sandal tree

Suid forests The Sind river-valley forests present many peculiar features. They are locally reported to have been formed as game preserves by the Mirs or Musalman rulers, and are divided into convenient blocks or belás, fringing the entire course of the Indus. Being absolute State property, their management is embarrassed by no difficulties, excepting those caused by

the outlying Province of Sind

the uncontrollable floods of the river They furnish abundant firewood, but little timber of value, their chief produce being labial (Acacia arabica), bahán (Populus euphratica), and tamarisk (Tamarix dioica) In the Punjab, the principal forests of Punjab deodára (Cedrus Deodara) lie beyond the British frontier, in forests the Himálayan valleys of the great rivers, but many of them have been leased from the bordering States, in order to secure a supply of firewood and railway sleepers. On the Punjab plains, the only woods are those growing on the rákhs or upland plateaux which rise between the converging river basins. The chief trees found here are varieties of Prosopis, Capparis, and Salvadora, but the Forest Department is now laying out more valuable plantations of sissu (Dalbergia Sissoo), baer (Zizyphus jujuba), and kikar

The North-Western Provinces present the Himalayan type Forests of forest in Kumaun and Garhwal, where the characteristic of N W trees are the chil (Pinus excelsa) and chir (Pinus longifolia), with but little deodára Farther west occurs a forest belt of sál, which may be said to form the continuous boundary between Nepál and British territory Owing to the facility of water communication and the neighbourhood of the great cities of Hindustán, these sál forests have long ago been stripped of their valuable timber, and are but slowly recovering under the care of the Forest Department Oudh and Northern Bengal of Oudh continue the general features of the North-Western Provinces, Bengal but the hill station of Darjiling is surrounded by a flora of the temperate zone

Calcutta has, from its foundation, drawn its supply of firewood from the mexhaustible jungles of the SUNDARBANS, Sundarban which have recently been placed under forest conservancy forests This tract, extending over 5000 square miles, is a dismal swamp, half land, half sea or fresh water, overgrown by an almost impenetrable jungle of timber-trees and under-The most valued wood is the sundari (Heretiera littoralis), which is said to give its name to the tract Assam and Chittagong, like the Malabar coast and British Burma, still possess vast areas of virgin forest, although the more accessible tracts have been ruthlessly laid waste and Pinus Kasya, the timber trees of Assam include nahor or Assam nageswar (Mesua ferrea), súm (Artocarpus Chaplasha), and járul forests (Lagerstræmia Flos-Reginæ) Ficus elastica, yielding the caoutchouc of commerce, was formerly common, but now the supply is chiefly brought from beyond the frontier tions of teak, tun (Cedrela Toona), sissu, and Ficus elastica are

Purmese forests

Central India now being formed and guarded by the Forest Department In Burma, the importance of teak exceeds that of all the other timber-trees together. Next comes iron-wood (Xylia dolabriformis), and Acacia Catechu, which yields the cutch of commerce. Throughout the centre of the peninsula, forests cover a very extensive area, but their value is chiefly local, as none of the rivers are navigable. Towards the east, sál predominates, and in the west there is some teak, but fine timils of either species is comparatively scarce. Rájputána has beautiful tree of its own, the Anogeissus pendula, with smalleaves and drooping branches.

Forest adminis tration 'Reserved' forests

From the administrative point of view, the Indian forest are classified as 'reserved' or as 'open'. The reserved forest are those under the immediate control of officers of the Forest Department. They are managed as the property of the State, with a single eye to their conservancy and future development as a source of national wealth. Their limits are demarcated after survey, nomadic cultivation by the hill tribes is prohibited, cattle are excluded from grazing, destructive creepers are cut down, and the hewing of timber, if permitted at all, is placed under stringent regulations. The open forests are less carefully guarded, but in them, also, certain kinds of timber-trees are preserved. A third class of forest lands consists of plantations, on which large sums of money are spent annually, with a view to the rearing and development of timber trees.

It is difficult to present, in a summary view, the entire

financial aspects of the labours of the Forest Department

In 1872-73, the total area of reserved forests in India was estimated at more than 6,000,000 acres, and the area has

probably been doubled since that dat. In the same year, the total forest revenue was £477,000, as compared with an expenditure of £295,000, thus showing a surplus of £182,000

'Open' forests 'Planta

tions

Forest finance 1873 1883

1873

1878

By 1877-78, the revenue had increased to £664,102, of which £160,308 was derived from British Burma, and £126,163 from Bombay The forest exports in that year in cluded—teak, valued at £406,652, lac and lac dye, £362,008,

caoutchouc, £89,381, and gums, £183,685

1683

By the end of 1882-83, the total forest revenue had further increased to £963,859, of which £250,389 was derived from British Burma, £209,035 from Bombay, £101,340 from the North-Western Provinces and Oudh, £97,765 from the Central Provinces, £90,644 from Madras, £76,671 from the Punjab, £69,396 from Bengal, £24,861 from Assam, £28,704 from Berar, and £13,802 from Coorg From each of these Pro-

vinces a surplus profit was realized over working expenses A small forest revenue is also obtained from tracts in Ajmere and in Baluchistan, but not sufficient, up to 1883, to cover the expenses of the Department Total forest expenditure in 1882–83, £577,726, showing a surplus of £386,133 Average forest revenue for ten years ending 1882–83, £703,424 per annum, average expenditure, £467,624, average surplus, £235,800 But the above figures fail to exhibit the true working of the Forest Department, which is gradually winning back for India the fee simple of her forest wealth, when it was on the point of being squandered beyond the possibility of redemption

The practice of nomadic cultivation by the hill tribes may Nomadic conveniently be described in connection with forest conservation, of which it is the most formidable enemy. In all the great virgin forests of India, in Arakan, on the north-east Its area frontier of Assam and Chittagong, throughout the Central Provinces, and along the line of the Western Ghats, the aboriginal tribes raise their crops of rice, cotton, and millets by a system of nomadic tillage. A similar method has been found in Madagascar, and, indeed, from its simplicity and its appropriateness, it may fairly be regarded the most primitive form of agriculture followed by the human race. Known as taungya in Burma, jum on the north-east frontier, dahya in Central India, kil in the Himálayas, and kumári in the Western Gháts, it is practised without material differences by tribes of the most diverse origin.

The essential features of such husbandry are the burning Its vane down of a patch of forest, and sowing the crop with little or no ties tillage in the clearing thus formed. The tribes of the Bombay coast break up the cleared soil with a sort of hoe-pick and spade, or even with the plough, in other parts of India, the soil is merely scratched, or the seed scattered on the surface without any cultivation. In some cases, a crop is taken off the same clearing for two or even three years in succession, but more usually the tribe moves off every year to a fresh field of operations. Every variety of implement is used, from the bill-hook, used alike for hewing the jungle and for turning up the soil, to the plough. Every degree of permanence in the cultivation may be observed, from a one year's crop to the stage at which an aboriginal tribe, such as the Kandhs, visibly passes from nomadic husbandry to regular tillage.

To these nomad cultivators the words rhetorically used by Tacitus of the primitive Germans are strictly applicable Forest clearing by fire

-Arva per annos mutant, et superest ager The wanton destruction wrought by them in the forest is incalculable addition to the timber-trees deliberately burned down to clear the soil, the fire thus started not unfrequently runs wild through the forest, and devastates many square miles Wherever timber has any value from the proximity of a Restraints market, the first care of the Forest Department is to prohibit these fires, and to assign heavy penalties for any infringement of its rules The success of a year's forest operations is mainly estimated by the degree in which the reserves have been saved from the flames.

Ments of nomadic tillage

But vast tracts of country yet remain in which it would be equally useless and impossible to place restraints upon nomad The system yields a larger return for the same amount of labour than permanent plough-husbandry A virgin soil, manured many inches deep with ashes, and watered by the full burst of a tropical rainfall, returns forty and fifty-fold of rice, which is the staple grain thus raised. In addition to rice. Indian corn, nullet, oil seeds, and cotton, are sometimes grown in the same clearing, the seeds being all thrown into the ground together, and each crop ripening in succession at its own season. Except to the eyes of a forest officer, a patch of nomadic tillage is a very picturesque sight. Men, women, and children all work together with a will, for the trees must be felled and burned, and the seed sown, before the monsoon breaks Save on the western coast and the Ghats (where the plough is occasionally used), the implement generally employed for all purposes is the dao or hill-knife, which performs the office alike of axe, hoe, dibbler, and sickle

Irrigation

In a tropical country, where the rainfall is capricious in its incidence and variable in its amount, the proper control of the water-supply becomes one of the first cares of Government Its expenditure on irrigation works may be regarded as an investment of the landlord's capital, by which alone the estate can be rendered profitable Without artificial irrigation. large tracts of country would he permanently waste, while others could only be cultivated in exceptionally favourable Irrigation is to the Indian peasant what high cultiva-Its function tion is to the farmer in England It augments the produce of his fields in a proportion far larger than the mere interest upon the capital expended It may also be regarded as an insurance against famine When the monsoon fails for one or two seasons in succession, the cultivator of 'dry lands' has no

in India.

hope, while abundant crops are raised from the fortunate fields commanded by irrigation works This contrast was painfully realized in Southern India during the terrible years of 1876 to 1878, the limit between famine and plenty being marked by the boundaries of the irrigated and non irrigated areas It would, however, be an error to conclude that any outlay will absolutely guarantee the vast interior of the peninsula from famine Much, indeed, can be done, and much is being done, during year by year, to store and distribute the scantv and irregular famine water-supply of this inland plateau But engineering possibilities are limited, not only by the expense, but by the unalterable laws of nature A table-land, with only a moderate rainfall, and watered by few perennial streams, broken by many hill ranges, and marked out into no natural drainage basins, can never be completely protected from the vicissitudes of the Indian seasons

Irrigation is everywhere dependent upon the two supreme Irrigation considerations of water supply and land-level The sandy areas desert, which extends from the hills of Rajputana to the basin of the Indus, is as hopelessly closed to irrigation, from its almost entire absence of rainfall, as is the confused system of hill and valley in Central India, with its unmanageable levels Farther west, in the Indus valley, irrigation becomes possible, and in no part of India has it been conducted with greater perseverance and success The entire Province of Sind, and Sind several of the lower Districts of the Punjab, are absolutely dependent upon the floods of the Indus Sind has been com pared to Egypt, and the Indus to the Nile, but the conditions of the Indian Province are much the less favourable of the In Sind, the average rainfall is barely 10 inches in the year, the soil is a thirsty sand, worst of all, the river does not run in confined banks, but winders at its will over a wide valley The using of the Nile is a beneficent phenomenon, which can be depended upon with tolerable accuracy, and which the industry of countless generations has brought under control for the purposes of cultivation The inundation of the Theuncon-Indus is an uncontrollable torrent, which sometimes does as trollable Indus. much harm as good

Broadly speaking, no crop can be grown in Sind except under Irrigation irrigation The cultivated area of over two million acres may in Sind, 1877-83 be regarded as entirely dependent upon artificial water-supply, although not entirely on State irrigation works. The water is drawn from the river by two classes of canals—(r) inundation channels, which only fill when the Indus is in flood, and 2 L

Irrigation in Sind.

ın 1877.

(2) perennial channels, which carry off water by means of dams at all seasons of the year The former are for the most part the work of ancient rulers of the country, or of the cultivators themselves, the latter have been constructed since the British In both cases, care has been taken to utilize abandoned beds of the river Irrigation in Sind is treated as an integral department of the land administration 1876-77, about 900,000 acres were returned as irrigated from works for which capital and revenue accounts are kept chief of these are the Ghár, Eastern and Western Nará, Sukkur (Sakhar), Phuleli, and Pinyari Canals, the total receipts were about £190,000, almost entirely credited under the head of land revenue In the same year, about 445,000 acres were irrigated from works for which revenue accounts only are kept, yielding about  $f_{.75,000}$  in land revenue The total area 'usually irrigated' in Sind was returned in 1880 at about 1,800,000 acres, out of a cultivated area of 2,250,000 acres

1883

The actual area cultivated by means of canal irrigation in Sind in 1882-83 was 1,673,293 acres, including jagir or revenuefree lands, the area assessed for Government revenue being 1,508,202 acres The gross assessed revenue from all sources amounted to £294,898, and the maintenance charges to £135,118, leaving a net revenue of £,159,780 actual receipts from productive irrigation works returned 4 25 per cent., and those from ordinary irrigation works, 12 95 per cent on the capital outlay incurred up to the end of the year Total capital outlay up to the end of 1882-83, £958,012, of which £623,267 had been expended on productive works, and £334,745 on ordinary irrigation works

Irugation

In the Bonibay Presidency, irrigation is conducted on a comin Bombay, paratively small scale, and mainly by private enterprise. Along the coast of the Konkan, the heavy local rainfall, and the annual flooding of the numerous small creeks, permit rice to be grown without artificial aid In Gujarat (Guzerát) the supply is drawn from wells, and in the Deccan from tanks, but both of these are liable to fail in years of deficient rainfall. Government has now undertaken a few comprehensive schemes of irrigation in Bombay, conforming to a common type head of a hill valley is dammed up, so as to form an immense reservoir, and the water is then conducted over the fields by channels, in some cases of considerable length 1876-77, the total area in Bombay (excluding Sind) irrigated from Government works was about 180,000 acres, yielding a revenue of about £,42,000 In the same year, the expenditure

1877

on irrigation (inclusive of Sind) was £65,000 under the head of extraordinary, and £170,000 under the head of ordinary, total, £235,000 In 1882-83, the area irrigated by Govern-1883 ment works in Gujarat and the Deccan amounted to 28,735 acres from productive works, and 138,468 acres from works not classed as productive Total Government irrigation, 167,203 acres, yielding a revenue of £77,746, against an expenditure of £37,171, leaving a surplus of £30,575 Besides these Government works, irrigation is carried on to a much larger extent in Bombay by private individuals from tanks, ponds, and watercourses Ordinary irrigated area in Bombay (exclusive of Sind), 550,000 acres, out of a total cultivated area of 22½ million acres

In some parts of the Punjab, irrigation is only one degree Irrigation less necessary than in Sind, but the sources of supply are more in the Punjab, numerous In the northern tract, under the Himálayas, and 1879-84. in the upper valleys of the Tive Rivers, water can be obtained by digging wells from 10 to 30 feet below the surface south, towards Sind, 'inundation channels' are usual upland tracts which rise between the basins of the main rivers are now in course of being supplied by the perennial canals of the Government According to the returns for 1878-79, out 1879 of a grand total of 23,523,504 acres under cultivation, 5,340,724 acres were irrigated by private individuals, and 1,808,005 acres by public 'channels,' total area under irrigation, 7,148,729 acres, or 30 per cent of the cuitivated area three principal Government works in the Purjab are the Western Jumna Canal, the Barí Doab Canal, and the Sirhind, The three the main branch of which, and some of its distributaries, were great Puniab opened in November 1882 An account of each of these works Canals is given in separate articles in The Imperial Gazetteer of India 1

Up to the close of 1877-78, the capital outlay on the three great Punjab Canals was £3,645,189, the total income in that year was £263,053, of which £171,504 was classified as direct, and £91,549 as indirect, the total revenue charges on works in operation were £224,316, of which £146,419 was for maintenance, and £77,897 for interest, thus showing a surplus of £38,737 On the Western Jumna Canal, taken singly, the net profit was £83,112 in 1877-78

By the end of 1883-84, the gross revenue from the Bárí Irrigation Doab and Western Jumna Canal, together with the Indus and in the Punjab, Sutley Inundation Canals, amounted to £428,416, and the 1883-84.

<sup>&</sup>lt;sup>1</sup> See articles JUMNA CANAL, Eastern and Western, BARI DOAB CANAL, SIRHIND CANAL, in The Imperial Gazetteer of India

Punjab Canal finance. 1884

working expenses to  $f_{197,032}$ , thus yielding a net revenue of £231,384, equal to a return of nearly 5 per cent on the capital of the canals opened This is exclusive of the Muzaffar garh Inundation Canal, which has no capital account, but which in 1882-83 yielded a return of £22,035, against working expenses amounting to £15,365, leaving a surplus of revenue over expenditure of £6670 Irrigation from the Sirhind Canal had only just commenced, but the revenue will increase in proportion to the rate of progress in constructing the distributary This work, together with the completion of branchdistributaries, is being pushed on as rapidly as possible

Punյab (anal statistics. 1854

The capital outlay on the three great Punjab canals, exclusive of contributions by Native States towards the construction of the Sirhind Canal, amounted at the close of 1883-84 to £5,033,284, the capital expended during the latter year being £282,524 Area irrigated from Government canals in 1883-84 —Western Tumna Canal, 472,426 acres Bari Doab Canal, 390,860 acres, Sirhind Canal, 5030 acres, inundation canals, 783,752 acres The ordinary irrigated area in the total, 1,652,068 acres Punjab, from Government works as well as by private in dividuals, may now be taken at about 8 million acres, out of a total cultivated area of over 23 million acres

Iruga i n in the Provinces

The North-Western Provinces present, in the great doáb, or high land between the Ganges and the Jumna, a continuation of the physical features to be found in the Punjab local rainfall, indeed, is heavier but before the days of artificial irrigation almost every drought resulted in a terrible It is in this tract that the Butish Government has been perhaps most successful in avering such calquities Sind, irrigation is an absolute necessity, in Lower Bengal, it may be regarded almost as a luxury, in the great river basins of Upper India, it serves the twofold object of averting famines caused by drought, of introducing more valuable crops and higher methods of agriculture

1278 83 1878

Concerning private irrigation from wells in the North-Four great Western Provinces, details are not available The great canals of the Doabs, Government works are the Ganges Canal, the Fastern Jumna Canal, the Agra Canals, and the I ower Ganges Canal 1 Up to the close of 1877-78, the total outlay had been £5,673,401 The gross income in that year was £,438,136, of which £337,842 was derived from water rates, and £100,294 from enhanced land revenue, the working expenses amounted to

<sup>1</sup> A full account of each of these works will be found under article GANGES CANAL, The Imperial Gazetteer, vol in

£143,984, leaving £294,152 for surplus profits, or 6 77 per N W P cent on the total capital expended on works in operation Canals The total area irrigated in the North-Western Provinces was 1,461,428 acres Of this total, 415,650 acres were under wheat. and 139,375 under sugar-cane

The total capital outlay on the four main canals just men- The four tioned in the North-Western Provinces up to 1882-83, was great canals, £,6,499,741, of which £,138,677 were expended during 1882-83 1882-83

The other canals in the N-W Provinces, not classed as productive works, included, in 1882-83, the following-namely, the Minor Dún Canal, the Rohilkhand and Bijnor Canal, the Bundelkhand  $_{N-W-P}^{\rm canals}$ irrigation works, the Cawnpur branch of the Lower Ganges Canal, and the Betwá Canal, constructed as a famine insurance work Total capital expended on all Government canals in the North-Western Provinces up to the end of 1882-83, £6,890,769, of which  $f_{232,341}$  was spent during the latter year. These canals may all be considered as practically complete, with the exception of the Lower Ganges and Agra Canals, in which some of the distributaries are as yet (1884) unfinished, and the Betwa Canal, which was under construction at the end of 1882-83

The gross revenue of the canals in the N-W Provinces, Total including water-rates, increased land revenue due to the canals, canal revenue in navigation charges in 1882-83, was £645,918, the charges N W P. agunst revenue amounted to £215,813, thus leaving a net 1883 revenue of £,430,105, or over 6 per cent on the total capital outlay, exclusive of the Betwa Canal Deducting from this the interest charges for the year, which amounted to £,249,601, there remained a clear profit or surplus of £,180,504 total area irrigated during 1882-83 was 1,974,175 acres, of which Irrigated 1,462,023 were supplied by the Ganges and Lower Ganges area, 1883 Canals, or their branches Of the irrigated area, 728,385 acres were under wheat, 662,693 acres under other food crops, 316,145 acres under indigo, 198,322 acres under sugar cane, and 52,493 acres under cotton Besides the canal irrigation, a vast area in the North-Western Provinces is supplied with water from wells, tanks, and miscellaneous works arca ordinarily irrigated in the North-Western Provinces (excluding Oudh) may be estimated at 7 to 8 million acres

No irrigation works have yet been introduced into Oudh by Irrigation A fair local rainfall, the annual overflow of in Oudh the rivers, and an abundance of low-lying swamps, combine to furnish a water-supply which is ample in all ordinary years According to the Settlement returns, out of a total cultivated area of 8,276,174 acres, 2,957,377 acres, or 35 per cent, are

irrigated by private individuals. But this figure probably includes low lands watered by natural overflow

Irrigation in Bengal Proper

Embank

ments

Throughout the greater part of Bengal Proper there is scarcely any demand for artificial irrigation, but Government has undertaken to construct works in those exceptional tracts where experience has shown that drought or famine is to be feared In the broad valleys of the Ganges and the Brahmaputra, and along the deltaic seaboard, flood is a more frequent calamity than drought, and embankments here take the place of canals The Public Works Department in Lower Bengal has over 2000 miles of embankments under its charge, upon which £79,105 was expended in 1877-78, either as direct outlay or in advances to landowners. The wide expanse of Northern Bengal and Behar, stretching from the Himalayas to the Ganges, is also rarely visited by drought, although, when drought does come, the excessive density of the population brings the danger of famine very near In Saran District it has been found necessary to carry out a scheme for utilizing the discharge of the river Gandak

The Ous a

The great irrigation works in I ower Bengal are two in number and belong to two different types -(1) In the delta of Orissa an extensive system of canals has been constructed on the pattern of those lower down the Coromandel coast They store up the water by means of a weir or anicut thrown across the Mahanadi river 1 The Orissa works are intended to avert the danger of both drought and flood, and also to be useful for navigation In average seasons, ie in five years out of six, the local rainfall is sufficient for the rice crop, which is here the sole staple of cultivation, and therefore it is not to be expected that these canals will be directly or largely remunerative. But, on the other hand, if they save the Province from a repetition of the disastrous year 1865-66, the money will not have been expended in vain. A canal, originally designed as a branch of the Orissa works runs through Midnapur District and debouches on the Húgli

The Son Cat al (2) In South Behar, the flood discharge of the Son has been intercepted, after the system of engineering followed in the North-West, so as to irrigate the thirsty strip of land along the south bank of the Ganges, where distress has often been severely felt? In this case, also, the expenditure must be regarded rather as an insurance fund against famine than as reproductive outlay. The works are not yet complete.

<sup>1</sup> See article MAHANAIA, The Imperial Garetteer

<sup>\*</sup> See article Son Canals, The Imperial Gazetteer

but the experience already gained proves that irrigation is wanted even in ordinary seasons

Up to the close of the year 1877-78, the capital expendi- Irrigation ture on all the State irrigation works in Lower Bengal was in Bengal, 1878-83 £4,653,903, the gross income for the year was £49,477, the working expenses were £,70,286, and the estimated interest on 1878 capital, at 41 per cent, amounted to £203,971, thus showing a deficit of £,224,780 The area irrigated was about 400,000 acres

By the end of 1882-83, the total direct capital outlay Irrigation (excluding interest) on State navigation and irrigation canals in Bengal, in Bengal was £5,331,726, the gross income for the year was £,207,444 (including the Calcutta Canals and Nadiva river works. for which capital and revenue accounts are not kept), and the working expenses £514,898, showing a deficit of £307,454 Adding to this the amount of interest on capital, which in 1882-83 amounted to £211,550, calculated at 4 per cent, the total net deficit for the year amounted to £519,004 The four chief navigation and irrigation canals, however, returned a surplus (excluding interest) of £15,527 of revenue over working expenses The great deficit of current expenditure over current revenue occurred in the Orissa coast canals, embankments, draininge works, etc The area irrigated from Government canals in the Lieutenant Governorship of Bengal is about 450,000 acres Including private works, about 1 million acres out of a total estimated area of 541 million acres under cultivation, are irrigated in Lower Bengal

In the Madras Presidency, and generally throughout Southern Irrigation India, facilities for irrigation assume a decisive importance in in Madras determining the character of agriculture Crops dependent on the rainfall are distinguished as 'dry crops,' comprehending the large class of millets Rice is grown on 'wet land,' which means land capable of being irrigated Except on the Malabar or western coast, the local rainfall is nowhere sufficiently ample, or sufficiently steady, to secure an adequate water-supply Everywhere else, water has to be brought to the fields from rivers, from tanks, or from wells cultivated area of Madris, 17 per cent was returned by the Famine Commissioners in 1878 as assessed as 'wet land 'or 'Dry 'and 51 millions of acres out of an estimated cultivated area of 32 'wet' land But the actual irrigated area from all sources, including tanks and wells, was returned by the Famine Commissioners at about 7 millions of acres

From time immemorial, the industrious population of the Petty Madras Districts has made use of all the means available works

to store up the rainfall, and direct the river floods over their fields The upland areas are studded with tanks, which sometimes cover square miles of ground, the rivers are crossed by innumerable anicuts or dams, by which the floods are diverted into long aqueducts. Most of these works are now the property of Government, which annually expends large sums of money in maintenance and repairs, looking for remuneration only to the augmented land revenue average rate of assessment is 98 6d per acre on irrigated land, as compared with only 2s 3d per acre on unirrigated land

Works in deltas, 1878–83

It is therefore not only the duty, but the manifest advantage, the Madras of Government to extend the facilities for irrigation in Madras, wherever the physical aspect of the country will permit deltas of the Godavari, the Kistna, and the Káveri (Cauvery), have within recent years been traversed by a network of canals, and thus guaranteed against risk of famine 1 Smaller works of a similar nature have been carried out in other places, while a private company, with a Government guarantee, has undertaken the more difficult task of utilizing on a grand scale the waters of the Tungabhadra 2 amid the hills and vales of the interior The assessed irrigated area in the Presidency, of 51 million acres, yielded in 1878 a land revenue of 2 millions Of this total, 1,680,178 acres, with a revenue of £739,778, were irrigated in 1878 by eight great systems, for which revenue and capital accounts were kept works consisted of about 35,000 tanks and irrigation canals, and about 1140 anicuts or dams across streams area under irrigation from public and private sources in Madras was in 1878, as already stated, about 7 inilion acres, out of a total cultivated area of 32 million acres

Madras irrigation works, 1882-83

1878

In 1882-83, the Madras irrigation scheme included seven main systems, classified as productive public works, namely, -the Godavari delta system, the Kistna delta system, the Penner (Ponnaiyár) anicut system, the Sangam anicut project (under construction), the Karnul canal (purchased from the Madras Irrigation Company in July 1882), the Kaveri delta system, and Srivaikuntham anieut system An account of each of these works separately will be found in The Imperial Gazettees of India Irrigation and navigation works, not classified as productive, include those known as the Chedambaram tank system, the Pálár anicut system, the Pelandoral anicut system, the Madras water supply and irriga-

<sup>1</sup> See article GODAVARI RIVER, The Imperial G zettler

<sup>2</sup> See article Ti NGABHADRA, 11e Imperial Garetteer

tion extension project, and the Buckingham Canal. There are also a number of minor irrigation and protective works, for which neither capital nor revenue accounts are kept The area irrigated by productive public works in Madras in 1882-83 was 1,757,579 acres, and that by all other Government irrigation works, 2,615,590 acres, making a total of 4,373,169 acres

The acquisition of the Karnúl Canal during 1882 materially Madras raised the outlay invested in productive public works, and Irrigation Finance, greatly reduced the returns yielded in former years by this 1883 class of works in Madras. The total capital outlay, direct and indirect, incurred on productive public works up to the end of 1882-83, amounted to £3,990,552The gross revenue, including share of enhanced land revenue, amounted to £,360,062, the maintenance charges, direct and indirect, was £,107,197, leaving a net revenue of £,252,865, equal to 634 per cent on the total capital outlay up to the end of the year If, however, the outlay on the Sangam anicut works (which had not commenced to earn revenue in 1882-83), and the purchase money for the Karnul canal, be excluded from the account, the net returns would be 12 per cent on the capital outlay, against 133 per cent obtained during the previous year With regard to irrigation and navigation canals not classified as productive, the capital outlay, direct and indirect, incurred up to the end of 1882-83, amounted to £988 907 The gross revenue during 1882-83, including share of land revenue debitable to these works, was  $\pm 31,319$ , the expenditure was  $f_{27,520}$ , leaving a net revenue of  $f_{3799}$ ,

equal to 0 38 per cent. on the total capital outlay In Mysoie, tanks, anicuts, and wells dug in the dry beds of Irrigation rivers afford the means of irrigation Since the late disastrous in Vissore famine of 1876-78, comprehensive schemes of throwing embankments across river valleys have been undertaken by

Government The whole area under irrigation from public and

private sources in Mysore is \$\frac{3}{2}\$ of a million acres, out of a total cultivated area of 4 to 5 million acres

In the Central Provinces, irrigation still remains a private In Central enterprise According to the Settlement returns, out of a total Provinces cultivated area of 13,610,503 acres, 804,378 acres, or 6 per cent, are irrigated by private individuals. The only Government work is a tank in the District of Nimár In 1882-83, the area arrigated by private individuals was returned at 770,583 acres, and by Government works, 238 acres from the Nimár tank, out of a total of 14,165,212 acres of cultivated area

In British Burma, as in Lower Bengil, embankments take the In Burma.

place of canals, and are classed as 'irrigation works' in the reports. Within the last few years, Government has spent £318,000 in Burma under this heading, to save the low rice-fields along the Irawadi from destructive inundation

Statistics for British India, 1868 to 1883

The foregoing paragraphs have given the Provincial statistics of irrigation, so far as available. The differences in the local systems, and the variety of sources from which the outlay on irrigation works is derived, render a single generalized statement for all India misleading. Apart from private irrigation works and certain classes of Government works, the capital expended by the Government on irrigation is returned at 19 millions sterling during the sixteen years ending 1882-83 Including 13 million sterling expended on the Madras Irrigation Company's works (taken over by Government), the total outlay would amount to nearly 21 millions sterling during the same period. This statement, although it altogether fails to disclose the whole expenditure on Indian irrigation, suffices to show the magnitude of the operations involved

The following table shows the extent of cultivation and the average area irrigated in the Provinces for which the facts can be obtained. They were specially collected by the Indian Famine Commission, and published in its Report of 1880. But they must be taken as only approximate estimates. They differ from data obtained from other sources as may be seen by comparing the figures in the table with the later ones given in the foregoing Provincial paragraphs.

URDINARY ALLA OF CULTIVATION AND OF THE AHON IN CLAIMAN PROVINCES, AS ESTIMATED IN 1880

Prevince	Area ordin irily cultiv test	Area or immily	Percentage of the time cultivation
Thomas .	Acrs	Ar e	-1 -
Punjab	21,000,000	5 500,000	26 z
North Western Provinces and			
Oud),	36,000,000	11 500,000	32 O
bengal	54 500,000	1,000,000	15
Central I roymee-,	1 5,500,000	770,000	50
Beiar,	6,500,000	100,000	15
Bombay,	24,500,000	450,000	15
Surl,	2,250,000	1 700 000	გიი
Madias,	32,000,000	7, ,00,000	2,0
My me,	5,000 000	გიი,იიი	160
I otal for the Provinces for which the facts were			
a certamed,	197,250,000	29,220,000	148

It will be seen from the preceding table that irrigation is most Distribu resorted to in the Provinces with the scantiest or most pre-tion of carious rainfall. In Sind, tillage depends almost entirely on an over India artificial water-supply, and four-fifths of the cultivated area are Sind ascertained to be irrigated. In Northern India, the deficient Northern rainfall of the Punjab and the high-lying dodbs, or intermediate India river plains of the North-Western Provinces, also demands a large measure of irrigation The irrigated area, accordingly, amounts to from over one fourth to one-third of the whole cultivation In Madras, it is under one-fourth, in Mysore, it is Southern one-sixth, in the Central Provinces, it is one-twentieth But India the dry uplands of Bombay, the Central Provinces, and Berar, Central where the proportion of irrigated lands sinks to about one-India sixtieth, undoubtedly require a larger artificial water-supply than they possess at present The black soil of these tracts, however, is very retentive of moisture To a certain extent it stores up and husbands the rainfall It thus lessens the necessity for irrigation In Bengal, where the irrigated area is only Lower 1 8 per cent of the cultivated area, the abundant rainfall and Bengal the inundations of the Ganges, the Brahmaputra, the Mahanadi, and of the river systems connected with these main arterics, take the place of canals or an artificial water-supply

FAMINIS—In any country where the population is dense Famine-and the means of communication backward, the failure of a harvest, whether produced by drought, by flood, by blight, by Natural locusts, or by war, causes intense distress. Whether such calamities distress shall develop into famine is merely a matter of degree, depending upon a combination of circumstances—the comparative extent of the failure, the density of the population, the practicability of imports, the facilities for transport, the resources of private trade, and the energy of the administration

Drought, or a failure of the regular rainfall, is the great Cause of cause of famine. No individual foresight, no compensating scarcity, influences, can prevent those recurring periods of continuous drought with which large Provinces of India are afflicted. Even an average ruinfall in any one year, if irregularly distributed, or at the wrong seasons, may affect the harvest to a moderate degree, so also may flood or blight. The total failure of one monsoon may result in a general scarcity. But and of rea famine proper, or widespread starvation, is usually caused by a succession of seasons of drought. The cultivators of India are seldom dependent upon a single harvest, or upon the crops of one year. In the event of a partial failure, they can draw for their

food-supply either upon their own grain pits or upon the stores of the village merchants. The first sufferers, and those who also suffer most in the end, are the class who live by daily wages. But small is the number that can hold out, either in capital or credit, against a second year of insufficient rainfall, and even the third season sometimes proves adverse. The great famines in India have been caused by drought, and usually by drought continued over two or three years.

Watersupply It becomes necessary to inquire into the means of husbanding the water supply. That supply can be derived only from three sources—(1) Local rainfall, (2) natural inundation, and (3) artificial irrigation from rivers, canals, tanks, or wells. Any of these sources may exist separately or together. In only a few parts of India can the rainfall be entirely trusted, as both sufficient in its amount and regular in its distribution. These favoured tracts include the whole strip of coast beneath the Western Gháts, from Bombay to Cape Comorin, the greater part of the Provinces of Assam and Burma, together with the deltaic districts at the head of the Bay of Bengal. In these Provinces the annual rainfall rarely, if ever, falls below 60 to 100 inches, artificial irrigation and fainine are there alike unknown.

Favoured Provinces

The irrigation area of India

The rest of the Indian peninsula may be described as liable, more or less, to drought In Orissa, the scene of the most intense famine of recent times, the average rainfall exceeds 60 inches a year, in Sind, which has been exceptionally free from famine under British rule, the average drops to less than 10 inches The local rainfull, therefore, 15 not the only element to be considered. Breadly speaking, artificial irrigation has protected, or is now in course of protecting, certain fortunate regions, such as the eastwird deltas of the Madras rivers and the upper valley of the Ganges The rest, and by far the greater portion, of the country is still exposed to famine Meteorological science may possibly teach us to foresee what is coming 1. But it may be doubted whether administrative efforts can do more than alleviate the calamity when once famine has declared itself. Lower Bengal and Oudh are watered by natural mundation as much as by the local rainfall. Sind derives its supplies mainly from comple filled by the floods of the Indus, the Punjab and the North-Western Provinces are dependent largely upon wells, the Decean, with the entire south, is the land of tanks and reservoirs. But in all these Provinces, when the rainfall has fuled over a series of

<sup>1</sup> Sec the chapter on Indian Meteorology at the end of this volume

years, the canal supply must likewise fail after no long interval Waterworks on a scale adequate to guarantee the whole of India from drought not only exceed the possibilities of finance, they are also beyond the reach of engineering skill

The first great famine of which we have any trustworthy Summary record is that which devastated the lower valley of the Ganges of Indian in 1769–70 One-third of the population of Bengal is credibly 1770 1878 reported to have perished. The previous season had been bad, and, as not uncommonly happens, the break-up of the 1769–70 drought was accompanied by disastrous floods. Beyond the importation into Calcutta and Murshidábad of a few thousand hundredweights of rice from the Districts of Bakarganj and Chittagong, it does not appear that any public measures for relief were taken or proposed <sup>1</sup>

The next great famine was that which afflicted the Karnatik Famines of from 1780 to 1783, and has been immortalized by the genius 1780-83, It arose primarily from the ravages of Haidar Alf's army A public subscription was organized by the Madras Government, from which sprang the 'Monegar Choultry,' a permanent Madras institution for the relief of the native poor In 1783-84, Hindustan Proper suffered from a prolonged drought, which stopped short at the frontier of British territory Warren Hastings, then Governor-General, advocated the construction of enormous granaries, to be opened only in times of necessity One of these granaries or golas, stands to the present day in the city of Patn'i, but it was never used until the scarcity of 1874 In 1790-92, Madras was again the scene of a two-1790-92, years' famine, which is memorable as being the first occasion on which the starving people were employed by Government on relief works Fimines again occurred in Southern India in 1802-04, 1807, 1812, 1824, 1833, 1854, and 1866 A terrible dearth in 1838 caused great mortality in the North-1838 Western Provinces

But so little was done by the State in these calamities, that Famines few administrative lessons can be learned from them. In of 1861 1860-61, however, a serious attempt was made to alleviate an exceptional distress in the North-Western Provinces. About half a million persons are estimated to have been relieved, at an expenditure by Government of about three-quarters of a

<sup>1</sup> A full account of the famine of 1769-70 is given in Hunter's Annals of Kural Bon, al, pp 19-55 (5th ed) The official record of this and the subsequent famines will be found in the Report of the Indian Famine Commission, presented to Pailiament 1880, part 1 pages 62 84

and of r866

million sterling Again, in 1865-66, which will ever be known as the year of the Orissa famine, the Government attempted to organize relief works and to distribute charitable funds on neither of these occasions can it be said that its efforts In Orissa, especially, the admitted loss of were successful one-fourth of the population proves the danger to which an The people of Orissa died isolated Province is exposed because they had no surplus stocks of grain of their own, and because importation, on an adequate scale, was physically impossible by sea or land

Famine of 1873-74

Passing over the prolonged drought of 1868-70 in the North Western Provinces and Raiputana, we come to the Behar scarcity of 1873-74, which first attracted the interest of England. Warned by the failure of the runs, and watched and stimulated by the excited sympathy of the public in England, the Government carried out a costly but comprehensive scheme of relief By the expenditure of  $6\frac{1}{3}$  millions sterling, and the importation of 1 million tons of rice, all loss of life was pre-The comparatively small area of distress, and the facilities of communication by rail and river, allowed of the accomplishment of this feat, which remains unparalleled in the annals of Indian famine

Famine of 1576-78

The famine of 1876-78 is the widest spread and the most prolonged that India has experienced The drought commenced in Mysore by the failure of the monsoon in 1875. and the fear of distress in the North Western Provinces did not pass away until 1879. But it will be known in history as the great famine of Southern India Over the entire Deccan, from Poona to Bangalore, the south west monsoon failed to bring its usual runfill in the summer of 1876 Tailure of the autumn of the same year, the north-cast monsoon proved deficient in the south-eastern Districts of the Madras Presi-The main food crop perished throughout an immense tract of country, and, as the harvest of 1875 had also been short, prices rapidly rose to famine rates. In November 1876. starvation was already at work, and Government adopted measures to keep the people alive. The next eighteen months, until the middle of 1878, were devoted to one long Failure of campaign against famine The summer monsoon of 1877 proved a failure, some relief was brought in October of that year by the autumn monsoon, but all anxiety was not removed until the arrival of a normal rainfall in June 1878

rain, 1877

rain, 1576

Meanwhile the drought had reached Northern India, where it found the stocks of grain already drained to meet the famine In the south Bengal, Assam, and Burma were the only Scarcity in Provinces which escaped in that disastrous year. The North-Northern India, Western Provinces, the Punjab, Rajputána, and the Central 1877-78 Provinces suffered from drought throughout the summer of 1877, and, from its consequences, far into the following year.

When once famine gets ahead of relief operations, the flood Famine in of distress bursts its embankments, and the people simply the South perish. Starvation and the long attendant train of famine-diseases sweep away their hundreds of thousands. In 1876–78, the importation of grain was left free, and within twelve months 268,000 tons were brought by land, and 166,000 tons by sea, into the distressed Districts of Southern India.

The total expenditure of Government upon famine relief Famine in 1876-78 may be estimated at 11 millions sterling, not expendiincluding the indirect loss of revenue, nor the amount debited 1876-78 against the State of Mysore For this large sum of money there is but little to show in the shape of works constructed The largest number of persons in receipt of relief at one time in Madras was 2,591,900 in September 1877, of these only 634,581 were nominally employed on works, while the rest were gratuitously fed From cholera alone, the deaths were Cholera returned at 357,430 for Madras, 58,648 for Mysore and 57,252 for Bombay Dr Cornish, the Sanitary Commissioner of Madras, well illustrated the effects of the famine by the returns of births and deaths over a series of years In 1876, when famine, with its companion cholera, was already beginning to be felt, the births registered in Madras numbered 632,113, and the deaths 680,381 In 1877, the Decrease year of famine, the births fell to 477,447, while the deaths of birth rose to 1,556,312 In 1878, the results of the famine showed 1877-78 themselves by a still further reduction of the births to 348,346, and by the still high number of 810,921 deaths 1879 the births recovered to 476,307, still below the average, and the deaths diminished to 548,158 These figures are only approximate, but they serve to show how long the results of famine are to be traced in the vital statistics of a people

With regard to the deaths, the Framine Commissioners thus Total report 'It has been estimated, and in our opinion on sub-deaths from stantial grounds, that the mortality which occurred in the famine of Provinces under British administration during the period of 1876 78 famine and drought extending over the years 1877 and 1878 amounted, on a population of 197 millions, to 5½ millions in excess of the deaths that would have occurred had the seasons been ordinarily healthy, and the statistical returns have made

certain what has long been suspected, that starvation and distress greatly check the fecundity of the population. It is probable that from this cause the number of births during the same period has been lessened by 2 millions, the total reduction of the population would thus amount to about 7 millions. Assuming the ordinary death roll, taken at the rate of 35 per thousand, on 190 millions of people, the abnormal mortality of the famine period may be regarded as having increased the total death-rate by about 40 per cent?

Famine a weak check on popula tion But when estimated over a period of years, the effect of famine as a check upon the population is small. The Famine Commissioners calculate that, taking the famines of the past thirty years, as to which alone an estimate of any value can be made, the abnormal deaths caused by famine and its diseases have been less than 2 per thousand of the Indian population per annum. As a matter of fact, cultivation quickly extended after the famine of 1877–78, and there were in Bombay and Madras 120,000 more acres under tillage shortly after the long protracted scarcity than before it

Famine of 1876-78 sum

The famine of 1876–78 affected, directly, a population of 58\frac{1}{3} million persons, and an area of 257 300 square miles. The average number daily employed by the State on relief works was 877,024. The average number of persons daily in receipt of gratuitous State relief was 446,641, besides private charities. Land revenue was remitted to close on 2 millions sterling. The famine lasted from 12 months in the North-Western Provinces, to 22 months in Madras. Its total cost, including both outlay and loss of revenue, is officially returned at £11,194,320\frac{1}{2}. A Commission was appointed to inquire into the causes of famine in India, and the means of averting or alleviating those calamities. Its report, presented to both Houses of Parliament in 1880, is replete with carefully collated facts regarding the past, and with wise suggestions for the future.

During the seven years which have elapsed since the great calamity of 1878, up to the time when these pages went to the press (June 1885), there has been no scarcity in India sufficiently intense or widespread to deserve the name of famine. Almost every season has brought a partial failure of the rains in one Province or another. But improved means of communication, and prompt measures for dealing with the distress, have prevented local scarcity from developing in any year into general famine.

<sup>1</sup> Report of the Indian Famine Commission, part 1 p 24 (1880)

## CHAPTER XVIII

## MEANS OF COMMUNICATION

THE means of communication in India may be classified Internal under four headings—(1) railways, (2) roads, (3) rivers, and cations (4) canals

The existing system of railway communication in India Indian dates from the administration of Lord Dalhousie The first railways Indian line of rail was projected in 1843 by Sir Macdonald Their Stephenson, who was afterwards active in forming the East 1843-71 Indian Railway Company But this scheme was blighted by the financial panic that followed soon afterwards in England. Bombay, the city which has most benefited by railway enterprise, saw the first sod turned in 1850, and the first line of 1 few miles opened as far as Thána (Tanna) in 1853 elaborate minute, drawn up by Lord Dalhousie in the latter year, substantially represents the railway map of India at the present day, although filled in by Lord Mayo's extensions of 1869 and by subsequent lines

Lord Dalhousie's scheme consisted of well chosen trunk Lord Dal lines, traversing the length and breadth of the peninsula, housies trunklines. and connecting all the great cities and military cantonments 1853 I hese trunk lines were to be constructed by private companies, to whom Government should guarantee a minimum of 5 per cent interest on their capital expended, and from whom it should demand in return a certain measure of subordination The system thus sketched out was promptly carried into execution, and by 1871 Bombay was put into direct rulway communication with the sister Presidencies of Calcutta and The task remaining for Lord Mayo in 1870 was the Lord development of traffic by means of feeders, which should tap Mayo's branch the districts of production, and thus open up the entire lines, 1870 This task he initiated by the construction of minor State lines on a narrower gauge, and therefore at a cheaper rate, than the existing guaranteed railways

Four classes of Indian lines
'Guaranteed' rail ways

The railways of India are now divided into four classes. In the first place, there are the railways constructed by guaranteed companies, for the most part between 1855 and 1875. These guaranteed railways, as a rule, follow the main lines of natural communication, and satisfy the first necessities of national life, both commercial and political. In the second place, there is a system of branch State lines, constructed during the last fifteen years and some of them destined to yield fruit only in the future. The third class comprises railways worked by private companies under a system of Government concessions. The fourth class are railways within Native States.

The four systems

(1) Guar anteed rulways Each of these classes of railways has been constructed on a different system in regard to the method by which the capital was raised. The four systems may be briefly, although not accurately, described as follows. I he guaranteed lines were constructed by companies formed in England, who raised their capital from their own shareholders under a guaranteed interest of 5 per cent from the Government of India. Profits in excess of 5 per cent, were to be shared between the Government and the Company, but the Government reserved the right of buying up the lines at their market value after certain terms of years. The construction of guaranteed railways was carried out by the Company's staff under the supervision of Government.

(2) State ranways

(3) 'As

The State railways were constructed from capital raised by the Government direct, and they were executed by engineers in Government employ. The 'assisted' railway companies are a more recent development. They raise their capital under a guarantee of a low interest from Government, with free grants of land, or other concessions. The guarantee is usually for a limited period, but, as presently explained, different arrangements are made in each case.

(4) Native State railways

The Native State lines are constructed from capital found by the individual State. The execution and management of these lines have, as a rule, been conducted by a staff employed by the Government of India, or by the trunk railway companies to which they serve as feeders.

truaran

The guaranteed lines, including the East Indian, which was transferred to Government on 1st January 1880, the Eastern Bengal Railway similarly transferred in 1883, and the Sind, Punjab, and Delhi Railway to be taken over by Government in January 1886, comprise the following —(1) The East Indian, running up the valley of the Ganges from Calcutta (Howrah) as far as Delhi, with a branch to Jabalpur (2) The Eastern

Bengal Railway, traversing the richest portion of the Gangetic The eight valley, and connected with the Northern Bengal State Railway great lines (3) The Great Indian Peninsula, which starts from Bombay, teed and sends one arm north-east to Jabalpur, with a branch to Nágpur, and another south-east to the frontier of Madras (4) The Madras line, with its terminus at Madras city, and two arms running respectively to the Great Indian Peninsula junction at Raichur and to Beyour on the opposite coast, with branches to Bangalore and Bellary (5) The Oudh and Rohilkhand, with its numerous branches, connecting Lucknow with Cawnpur, Benares, Alígarh, Moradábád, Bareli, Saháranpur, and Hardwar (6) The Bombay, Baroda, and Central India, which runs due north from Bombay through the fertile plain of Gujarat, to Ahmadabad, where it joins the Rajputana-Malwa State Railway, and ultimately connects with the East India and Sind, Punjab, and Delhi systems at Delhi and at Agra (7) The Sind, Punjab, and Delhi, consisting of three sections, one in Lower Sind, another from Delhi to Lahore, and the third from Lahore to Múltan (8) The South Indian (the only guaranteed line on the narrow gauge), in the extreme south, from Tinnevelli to Madras city, with branches to Arconum, Frode, Negapatam, Tuticorin, and Pondicherri The State lines are too numerous to be individually described The State

They include the extension from Lahore to Peshawar on the railways. north-west frontier, the 'missing link,' from Multan to Haidarabád, thus bringing the Punjab into direct connection with its natural seaport at Karáchi (opened throughout in 1878) the Raiputana-Málwa State Railway connecting Ahmadábad with Delhi, Agra, and Khándwa, and the Northern Bengal The last-named line starts from Sara ghat State Railway opposite the Damukdiha station of the Eastern Bengal Railway, whence it runs northwards to the foot of the Hima-A small 2 feet gauge railway is thence carried up to the sanitarium of Darnling, now within twenty-four hours' journey of Calcutta Among other State lines, the following may be specified The Tirhút State Railway with its various branches intersects Northern Behar, and is intended to extend to the Nepal frontier on one side, and to Assam on the The Dacca and Maimansingh Railway will open out Lastern Bengal, the Nagpur-Chhatisgarh Railway taps the great wheat growing Districts of the Central Provinces State lines or branches from the trunk railways are numerous In British Burma, a State line runs up the Irawadi valley from

Rangoon to Prome, with an extension to the frontier station of

Allan-myo A second line up the Sittaung valley to Taungngu, is open for more than half its length, and the remainder is expected to be opened in 1886

Assisted railways

Of the assisted railway companies, the principal are the Bengal and North-Western, running from the Sonpur station of the East Indian Rulway to Bahraich in Oudh, the Bengal Central line from Calcutta to Khúlná bordering on the Sundarbans, the various branches of the Southern Maráthá Railway in the Deccan, of which 214 miles out of a sanctioned length of 7181 miles were open in March 1885 the Rohilkhand and kumaun line, the Assam line to the recently-opened coal measures in Lakhimpur District, the little 2 feet gauge Darning Himalayan Railway (above mentioned), two short lines from the East Indian Railway to the shrine of Tarakeswar in Hugh District, and to Deogarh in the Santál Parganas, which are annually resorted to by large numbers of pilgrims from all parts of India Other lines belonging to the assisted class are projected or have commenced construction proposed to make on this system the Nagpur Bengul line, which will connect the Chhatisgarh wheat plateau with the Hugli river, and thus complete an almost straight line of communication between Calcutta and Bombay The Bhopál-Gwalior line will also be made on the assisted system, together with other lines belonging to the inner circle of communication in the interior of India

The 'assiste l System

The principle adopted in the assisted system is for Government to guarantee a low rate of interest, or to give a guarantee for a limited period. The Company has therefore the keenest inducement to make the railway pay, as its profits, above the low guaranteed rate depend on its own exertions, and on the economical working of the line The Government recoups itself for the money advanced under the low guarantee before the line has began to pay, by taking a share of the profits of the line when they exceed the guaranteed This is the general principle of the assisted railways interest But it is worked out differently in the case of almost every separate line, especially as regards the rate of interest guaranteed, and the duration or limits of the guarantee

Native railway-

Besides these there are 663 miles of rulway now (1885) opened in Native States, which have been constructed at the expense of the chiefs. The principal of these are the Baroda Railway, and the Bhaunagar Gondal Railway in Western India, the Bhopal Itarsi line in Central India, the Jodhpur line in

Rájputana, the Nizam's Railway in Haidarábad, the Mysore Railway in Southern India, and the Rájpura Patiála line in the The railways passing through the States of Gwalior and Holkar are not included in this list, as they were constructed, not at the cost of the chiefs themselves, but out of the proceeds of a loan made to the Government by the Mahárájas Sindhia and Holkar, and are worked entirely by Government in connection with the Rajputana-Malwa Railway

The two following paragraphs exhibit the railway statistics Railway of India for the years 1878 and 1885 They indicate the statistics, 1878 and progress which has been made during the seven years, since 1885, the materials for the first edition of this book were compiled

In 1878, the total mileage open for traffic was 8215 miles, of 1878, which 6044 miles belonged to guaranteed railways, and 2171 miles to State railways, total capital expended, £115,059,434, being £95,430,863 on the former, and £19,628,591 on the latter class, number of passengers conveyed, 38,519,792, number of tons of goods and minerals, 8,171,617, number of live stock, 594,249, gross receipts, £10,404,753, gross expenses, £5 206,938, net earnings, £5,197,815, of which only £195,787 is credited to the State railways, percentage of gross expenses to gross receipts, 50 04, varying from 34 97 in the case of the East Indian main line to an average of 78 27 for all the State lines These figures showed 1 mile of rulway to every 109 square miles of area in 1878, as compared with the area of British India, or to 180 square miles, as compared with the area of the entire peninsula The average cost of construction per mile was almost exactly The guaranteed railways embracing the great trunk lines throughout India, are on the 'broad gauge' of 5 feet 6 inches, the State lines follow, as a rule, the narrow or metre gauge of 3 281 feet On 31st March 1879, the total 1879 length opened was 8545 miles, and the capital invested, 120 millions sterling

The total extent of railways open for traffic in India on Railway the 31st March 1885 was 12,004 miles, of which 6906 statistics, miles were in the hands of companies, either guaranteed or assisted, 4434 miles were State lines, either Imperial or Provincial, and 664 miles belonged to Native States the same date, the extent of railway line under construction was 3555 miles, of which 963 miles were in the hands of companies, 2125 miles were under construction by the State, and 467 miles by Native States

The capital outlay on railways and connected steamer services. Kailway capital

Rulway hnance, 1884.

(exclusive of the Rohilkhand-Kumáun and Bareilly - Pilibhit lines), amounted on 31st December 1884 to £155,450,366 Of this sum, £105,319,144 was expended by guaranteed companies (inclusive of the cost of the East Indian Railway, which stands at £35,065,667), £42,924,898 on State railways (Imperial and Provincial), £3,423,259 on assisted companies' lines, and £3,783,065 on Native State The gross receipts during the calendar year 1884 amounted to £16,066,225, and the working expenses to £8,156,157 The net revenue amounted to £7,010,068, or 5 og per cent on the total capital expended up to the 31st December 1884 Of the net revenue, the East Indian Railway, including the State branches worked by the Company, contributed £,2,796 414, the guaranteed lines, £3 397,183, State lines, Imperial and Provincial, £1,609,156, and lines in Native States, £114,812 The total number of passengers carried was 73,815,119, the receipts amounting to £5,070,754. The aggregate tonnage of goods and merchandise carried was 16,663,007 tons, the receipts from goods traffic, etc. amounting to £,10 565,941

Riac-

Old mi'i-

As the railway system of India approaches its completion, the relative importance of the roads naturally diminishes From a military point of view, rapid communication by rail has now superseded the old marching routes as completely as in tary routes any European country Like Portsmouth in England, Bombay in India has become the national harbour for the embarkation and disembarkation of troops On landing at Bombay, regiments proceed, after a rest, to the healthy station of Deolálí on the plateau of the Deccan whence they can reach their ultimate destinations, however remote, by easy railway stages

The 'Gran l Frank Road '

The Grand Trunk Road, running up the entire valley of the Ganges from Calcutta to the north west frontier, first planned as a highway of armies in the 16th century by the Afghán Emperor Sher Sháh, and brought to completion under the administration of I ord William Bentinck, is now for the most part untrodden by troops The monument, erected to commemorate the opening of the military road up the Bhor Chát to wheeled traffic from Bombay, remains unvisited by Railways have bridged all but the most curious travellers the widest rivers and the most formidable swamps. They have scaled, with their aerial rigrags, the harrier range of the Ghats, and they have been carried on massive embankments over the shifting soil of the Gangetic delta

Bomlav inland route

But although the railway system now occupies the first place. both for military and commercial purposes, the actual importance of roads has increased rather than diminished They Extension do not figure in the imperial balance-sheet, nor do they strike of roads the popular imagination, but their construction and repair constitute one of the most important duties of the District They promote that regularity of local communication upon which the progress of civilisation so largely depends The substitution of the post-cart for the naked runner, and of wheeled traffic for the pack-bullock, is one of the silent revolutions effected by British rule

The more important roads are all carefully metalled, the Road material almost everywhere employed being kankar or cal-metal careous limestone In Lower Bengal and other deltaic tracts, where no kind of stone exists, bricks are roughly burnt, and then broken up to supply metal for the roads The minor streams are crossed by permanent bridges, with foundations of stone, and not unfrequently iron girders. The larger rivers Bridges of have temporary bridges of boats thrown across them during boats the dry serson, which give place to ferries in time of flood Avenues of trees along the roads afford shade, and material for timber The main lines are under the charge of the Public Works Department The maintenance of the minor roads has, by a recent administrative reform, been thrown upon the shoulders of the local authorities, who depend for their pecuniary resources upon District committees, and are often compelled to act as their own engineers Complete statistics are not available to show the total mileage of roads in British India, or the total sum expended on their maintenance

Inland navigation is almost confined to the four great rivers, Rivers the Ganges, the Brahmaputra, the Indus, and the Irawadi These flow through broad valleys, and from time immemorial have been the chief means of conveying the produce of the interior to the sea South of the Gangetic basin, there is not a single Indian river which can be called navigable Most of the South Indian streams, although mighty torrents in the rainy season, dwindle away to mere threads of water and stagnant pools during the rest of the year The Godávari and the The Goda-Narbadá, whose volume of water is ample, are both obstructed vari works by rocky rapids, which engineering skill has hitherto been unable to overcome A total sum of 11 million sterling has been almost in van expended upon the former river, with a view to improving it as a navigable highway. It is doubtful

whether water carriage is able to compete, as regards the more valuable staples, with communication by rail. But for cheap and bulky staples, or for slow subsidiary traffic, it is difficult to overrate the economic importance of the Indian rivers

The Ganges

The brahma putia

After the East Indian Railway was fairly opened, through steamers ceased to ply upon the Ganges, and the steam flotilla on the Indus shrank to insignificance when through communication by rail became possible between Multán and On the Brahmaputra and its tributary the Bárak, and on the Irawadi steamers still run secure from railway competition But it is in the Gangetic delta that river navigation attains its highest development. There the population may be regarded as half amphibious Every village can be reached by water in the runs season, and evers family keeps its boat. The main channels of the Ganges and Brahmaputra, and their larger tributaries, are navigable throughout the year During the rainy months, road carriage is altogether All the minor streams are swollen by the rainfall on the hills and the local downpour, while ficets of boats sail down with the produce that has accumulated in warehouses on the river banks

Minor streams

River tia æ The statistics of this subject belong rather to the department of internal trade, but it may be mentioned here that the number of liden boats registered in Bengal in the year 1877-78 was 401,729. These formed but a fraction of the real total. Boat racing forms a favourite native sport in the deltaic and eastern Districts. It is conducted with great spirit and rivalry by the villagers. In some places, the day concludes with an illuminated boat procession by torchlight

The No liya The great majority of the Bengal rivers require no attention from Government, but the network known as the three Nadiva rivers is kept open for traffic only by close supervision. These three rivers, the Bhagiráthí Jalangi, and Matabhángá, are all offshoots of the Ganges, which unite to make up the headwaters of the Húglí? In former times, the main volume of the Ganges was carried to the sea by one or other of these channels. But they now receive so little water as to be navigable only in the rainy season, and then with difficulty. Since the beginning of the present century, Government has undertaken the task of preventing these Hugli head waters from

<sup>1</sup> Dealt with in next chapter

<sup>\*</sup> See article Highi River, The Imperial Gazitteer, for an account of the engineering history of these rivers. It is also given in greater detail in Hunter's Statistical Account of Bengal, vol. ii. pp. 1932

further deterioration A staff of engineers is constantly employed to watch the shifting bed, to assist the scouring action of the current, and to advertise the trading community of the depth of water from time to time In the year 1882-83, a total sum of £11,667 was expended on this account, while an income of £18,296 was derived from tolls

The artificial water channels of India may be divided into Navigable two classes (1) Those confined to navigation, (2) those canals constructed primarily for purposes of irrigation Of the former class, the most important examples are to be found in the south of the peninsula On both the Malabar and the Coromandel coasts, the strip of low land lying between the mountains and the sea affords natural facilities for the construction of an inland canal running parallel to the shore In Malabar, the salt water lagoons or lakes, which form so Malabar prominent a feature in the local geography, merely required to back be supplemented by a few cuttings to supply continuous water communication from the port of Calicut to Cape Comorin On the east coast, the Buckingham Canal, running north from Bucking Madras city as far as the delta of the Kistna has recently hamCand been completed without any great engineering difficulties Bengal there are a few artificial canals, of old date, but of no great magnitude, in the neighbourhood of Calcutta principal of these form the system known as the Calcutta and Calcutta Lastern Canals, which consist for the most part of natural cinals channels artificially deepened, in order to afford a safe boat route through the Sundarbans Up to the close of the year 1877-78 a capital of £360332 had been expended by Government on the Calcutta Canals, the gross income in 1877-78 was £44 120, after deducting cost of repairs, etc., charged to revenue account, and interest at the rate of 41 per cent, a net profit was left amounting to £8748 In 1882-83, the tolls on the Calcutta Canals realized £53,372 Hill Tidil Canal in Midnapur District, which cuts off a difficult corner of the Hugh river, yielded a net revenue of £3171 in the same year In 1882-83, this canal only yielded High a net profit of £446, owing to the cost of dredging operations, Canal and the consequent closing of the canal for a portion of the

Most of the great irrigation works, both in Northern and Southern India, have been so constructed as to be available Naviga also for navigation. The general features of these works have tion on Bengal been already described. So far as regards Bengal, navigation canals,

on the Orissa Canals in 1877-78 yielded £3384, and in 1882-83 £10,847, on the Midnapur Canal, £10,692 in 1877-78, and £10,642 in 1882-83, and on the Son Canals, £5965 in 1877-78, and £3906 in 1882-83, the aggregate being considerably larger than was derived from irrigation. In on Mahas Madras, boat tolls in the Godavari delta brought in £4496 in 1877-78, and £6295 in 1882-83. In the Kistna delta, tolls realized £1718 in 1877-78, and £3956 in 1882-83. The works of the Madras Irrigation Company on the language were not made available for navigation until 1879, and they were taken over by Government in 1882. Their navigation receipts in that year amounted to £,1068.

## CHAPTER XIX

## COMMERCE AND TRADE

FROM the earliest days, India has been a trading country Trade of The industrial genius of her inhabitants, even more than her India natural wealth and her extensive seaboard, distinguished her In contrast with the Arabian from other Asiatic lands peninsula on the west, with the Malayan peninsula on Ancient the east, or with the equally fertile empire of China, India has always maintained an active intercourse with Europe Philology proves that the precious cargoes of Solomon's merchant ships came from the ancient coast of Malabar The brilliant medieval republics of Italy drew no small share of their wealth from their Indian trade It was the hope of participating in this trade that stimulated Columbus to the discovery of America, and Da Gama to the circumnavigation of the Cape of Good Hope Spices, drugs, dyes, and rare Medieval woods, fabrics of silk and cotton, jewels, and gold and silver, -these were the temptations which allured the first adventurers from Europe

The East and the West were then separated by a twelvemonth's voyage, full of hardships and perils. A successful venture made the fortune of all concerned, but trade was a lotters, and not far removed from puricy Gradually, as the native kingdoms fell, and the proud cities of mediæval India sank into ruin, the legendary wealth of India was found to test upon an unstable basis. It has been reserved for our own day to discover, by the touchstone of open trade, the real Modein source of her natural riches, and to substitute biles of raw produce for boxes of curiosities The cotton, grun, oil seeds, and jute of India now support a large population in England

Before entering on the statistics of Indian trade, it is well to The apprehend the function which commerce has now to perform function of in India The people have in some Provinces outgrown the trade in food producing powers of the soil, in many others, they are India pressing heavily upon these powers. Agriculture, almost their sole industry, no longer suffices for their support

New industries necessary

industries have become a necessity for their well-being Commerce and manufactures have therefore obtained an economical importance which they never had before in India, for they represent the means of finding employment and food for the rapidly increasing population. A popular sketch of the social aspects of Indian trade will therefore be first given, before arranging in more logical sequence the facts and figures connected with its recent history and development

A large external trade was an impossibility under the Mughal

Large sea borne trade under the Mughala

Emperors Their capitals of Northern India, Agra and Delhi,

Their cap tals.

merely royal camps

impossible hy more than a thousand miles from the river's mouth even the capitals of the seaboard Provinces were chosen for military purposes, and with small regard to the commercial capabilities of their situation Ihus in Lower Bengal, the Muhammadans under different dynastics fixed in succession on six towns as their capital. Each of these successive capitals was on a river bank, but not one of them possessed any foreign trade, nor indeed could have been approached by an old East Indiaman They were simily the court and camp of the king or the viceroy for the time being Colonics of skilful artisans settled round the palaces of the nobles to supply the luxurious fabrics of oriental life. After the prince and court had in some new caprice abandoned the city, the artisans remained, and a little settlement of weavers was often the sole surviving proof that the decaying town had once been a capital The exquisite muslins of Dacca and the soft silks of Murshidabad still bear witness to the cays when these two places were successively the capital or Bengal worked in their own houses. The manufactures of India were essentially domestic industries, conducted by special eastes, each member of which wove at his own hereditary loom, and in his own village or homestead

Growth of tradi ig Cities under Parti-li rul\_

One of the earliest results of British rule in India was the growth of great mercantile towns. Our rule derived its origin from our commerce, and from the first, the Fast India Company's efforts were directed to creating centres for maritime Other European nations, the Portuguese, the Dutch, the Danes, and the French, competed with us as merchants and conquerors in India, and each of them in turn attempted to found great seaports. The long Indian coast, both on the east and the west, is dotted with decaying villages which were once the busy scenes of those nations' carly European trade Of all their famous capitals in India, not one has now the

commercial importance of Cardiff or Greenock, and not one of them has a harbour which would admit at a low tide a ship drawing 20 feet

The truth is, that it is far easier to pitch a camp and erect a palace, which, under the native dynasties, was synonymous with founding a capital, than it is to create a centre of Emporia of commerce must grow of themselves, and cannot be called suddenly into existence by the fiat of the wisest autocrat It is in this difficult enterprise, in which the Portuguese, the Dutch, the Danes, and the French had successively failed, that the British in India have succeeded We make our appearance in the long list of races who have The ruled that splendid empire, not as temple-builders like the English as city Hindus, nor as palace and tomb builders like the Musalmans, builders nor as fort builders like the Maráthas, nor as church-builders like the Portuguese, but in the more commonplace capacity of town-builders, as a nation that had the talent for selecting sites on which great commercial cities would grow up, and who have in this way created a new industrial life for the Indian people

Calcutta and Bombay, the two commercial capitals of India, are the slow products of British rule Formerly, the industries of India were essentially domestic manufactures, each man working at his hereditary occupation, at his own loom or at his own forge Under British rule, a new era of A new era production has arisen in India—an era of production on a of produc great scale, based upon the co-operation of capital and labour, in place of the small household manufactures of ancient times based on To Englishmen, who have from our youth grown up in the co opera midst of a keen commercial civilisation, it is not easy to capital realize the change thus implied.

The great industrial cities of British India are the type Growth of Under native rule, the country had industrial of this change reached what political economists of Mill's school called 'the stationary stage' of civilisation The husbandmen simply raised the food-grains necessary to feed them from one harvest to another If the food crops failed in any district, the local population had no capital and no other crops wherewith to buy food from other districts, so, in the natural and inevitable course of things, they perished Now, the peasants of India supplement their food-supply with more profitable crops than the mere foodstuffs on which they live They also ruse an annual surplus of grain for exportation, which is available for India's own wants in time of need Accordingly,

there is a much larger aggregate of capital in the country, that is to say, a much greater national reserve or staying power The so-called 'stationary stage' in India has disappeared, and the Indian peasant is keenly alive to each new demand which the market of the world may make upon the industrial capa bilities of his country, as the history of his trade in cotton, jute, wheat, and oil seeds proves

Summary of Indian exports,

At the beginning of the last century, before the English became the ruling power in India, the country did not pro-1700 1885 duce £1,000,000 a year of staples for exportation During the first three-quarters of a century of our rule, the exports slowly rose to about £10,000,000 in 1834. During the half century since that date, the old inland duties and other remaining restrictions on Indian trade have been abolished Exports have multiplied by eight fold. In 1880, India sold to foreign nations £,66,000,000 worth, and in 1884-85, upwards of £80,000,000 worth of strictly Indian produce, which the Indian husbandman had raised, and for which he was paid In 1880, the total foreign trade of India, including both exports and imports, exceeded £,122,000,000 In 1884-85, the total foreign import and export trade of India, excluding treasure and Government stores, was over £136,000,000, or including treasure and Government stores, nearly £155,000,000

Inma's balance of trade

India has more to sell to the world than she requires to buy from it. During the five years ending 1879, the staples which she exported exceeded by an innual average of over £24,000,000 the merchandise which she imported 1 During the next five years ending 31st Murch 1884, the gross surplus of exports of merchandise over imports rose to 30 millions cerling per annum 2

About one third of this favourable balance of trade India receives in hard cash. During the five years ending 1879, she accumulated silver and gold, exclusive of re exports, at the rate of £7,000,000 per annum, and during the next five years ending March 1884 at the rate of Lil,000,000 per With another third she pays interest at low rates for unnum the capital with which she has constructed the material frame work of her industrial life, - her railways, irrigation works.

W hat -hc does with the baiance

This calculation deals with the gross unplus of exports over imports, without going into the question of re exports of foreign goods. The total 'merchandisc' exported, during the five years ending 1879, averaged £63,000,000, the total 'merchandise' imported averaged £35,000,000 Tre post, Table at p 562, entitled I oreign Trad of India

<sup>2</sup> This also is the gross steplus, without deductions for re-exports

cotton mills, coal mines, indigo factories, tea gardens, docks, steam navigation lines, and debt For that capital she goes into the cheapest market in the world, London, and she remits the interest, not in cash, but in her own staples, which the borrowed capital has enabled her to bring cheaply to the seaboard With the remaining third of her surplus exports, she pays the home charges of the Government to which she owes the peace and security that alone have rendered possible her industrial development

The Home Charges include not only the salaries of the The supervising staff in England, and the pensions of the military Charges and civil services, who have given their life's work to India. but the munitions of war, a section of the army, including the cost of its recruitment and transport, stores for public works, and the materiel for constructing and working the That materiel can be bought more cheaply in England than in India, and India's expenditure on good government is as essential an item for her industrial develop ment, and repays her as high a profit, as the interest which she pays in England for the capital with which she has constructed her dockyards and railways. But after paying for all the Home Charges for the interest of capital raised in England for Indian railways, and other reproductive works, and for the materiel required for their construction and maintenance. India has still a surplus of £11,000,000 from her export trade India's for which she receives payment in silver and gold

savings

The trade of India may be considered under four heads-Divisions (1) sea-borne trade with foreign countries, (2) coasting trade of Indian (3) frontier trade, chiefly across the northern mountains, (4) internal traffic within the limits of the Empire

The sea-borne trade most powerfully attracts the imagina- Sea borne tion, and we have the most trustworthy statistics regarding it trade With an extensive seaboard. India has comparatively few ports Calcutta monopolizes the commerce, not only of Lower Bengal, but of the entire river systems of the Ganges and the Brahmaputra Bombay is the sole outlet for the products of Western India, Gujarat (Guzerát), the Deccan, and the Central Provinces, Karáchi (Kurrachee) performs a similar office for the valley of the Indus, and Rangoon for that of the Irawadi These four ports have been chosen as the termini where the The four main lines of railway debouch on the sea. In the south of great India alone is the sea-borne trade distributed along the coast

The south-western side has a line of fair-weather ports, from Goa to Cochin. On the south east there is not a safe harbour, nor a navigable river mouth, although ships anchor off the shore at Madras, and in several other roadsteads, generally near the mouths of the rivers. A Madras harbour has, however, been under construction during several vears, and, in spite of destructive cyclones and storm-waves, the work is now well advanced. Since these sheets went to press, a project has been put forward for constructing docks at Madras, to cover 25 acres, protected by groins thrown out at right angles from the beach, and by a breakwater (1885)

Of the total foreign trade of India, Calcutta and Bombay till recently controlled about 40 per cent each Madras had 6 per cent, Rangoon 4 per cent, and Karachi 2 per cent, leaving a balance of only 8 per cent for all the remaining ports of the country. In 1884-85 Bombay had 43 51 per cent of the foreign trade. Calcutta, 36 97 per cent. Madras, 5 43 per cent. Rangoon, 4 67 per cent., and Karachi, 3 79 per cent, leaving only  $5\frac{1}{2}$  per cent for the minor ports, of which the principal are—Chittagong, Maulmain, Akyab, Futicorin, and Coconada. Calcutta and Bombay form the two central depots for collection and distribution, to a degree without a parallel in other countries. The growth of their prosperity is an index of the development of Indian commerce.

Minor ort>

The wo

I m'y Portugrese trade, 1500 1600

When the Portuguese, the pioneers of Fastern adventure, discovered the over sea route to India, they were attracted to the Malabar coast, where they found wealthy cities already engaged in active commerce with Persia, Arabia, and the opposite shore of Africa. From Malabar they brought back pepper and other spices, and the cotton calicous which took their name from Calicut. I lying their head quarters at Goa, they advanced northwards to Surat, the ancient port not only for Gujarát but for all Western Upper India. But with the Portuguese, the trading instinct was subordinate to the spirit of proselytism and to the ambition of territorial aggrandizement.

Dr ch monobole 16.0

I nglish factories, 1625 The Dutch superseded them as traders, and organized a colonial system upon the basis of monopoly and forced labour, which survives in Java to this day. I ast of all came the English, planting factories at various points along the Indian coast-line, and content to live under the shadow of the native powers. Wars with the Portuguese, with the Dutch, and with the French, first trught the English their own strength, and as the Mughal Empire fell to pieces,

they were compelled to become rulers in order to protect their commercial settlements Our Indian Empire has grown out of trade, but, meanwh le, our Indian trade has grown even faster than our empire 1

'The Governor and Company of Merchants of London English trading to the East Indies' was incorporated by Royal trade, Charter on 31st December 1600, having been directly called into existence by the grievance of monopoly prices imposed upon pepper by the Dutch Its first voyage was undertaken in 1601 by five ships, whose cargoes consisted of  $f_{,28,742}$  in bullion and £6860 in goods, the latter being chiefly cloth, lead, tin, cutlery, glass, quicksilver, and Muscovy hides destination was 'Atcheen in the Far East' (Sumatra) first English factory was established at Bantam in Java, in 1603 The return cargoes, partly captured from the Portuguese, comprised raw silk, fine calicoes, indigo, cloves, and mace The earliest English factories on the mainland of India were founded at Masulipatam in 1610, and Surat in 1612-15 1619, ten ships were despatched to the East by the Company, with £62,490 in precious metals and £,28,508 in goods, the proceeds, brought back in a single ship, were sold for £,108,887 The English made no great advance in trade during the 17th century By the massacre of Amboyna (1623) the Dutch drove the English Company out of the Spice Islands, and the period of its great establishments (aurangs) for weaving had not yet commenced in India.

Early in the 18th century, our affairs improved During the Our trade twenty years ending 1728, the average annual exports from advances, England of the East India Company were £,442,350 of bullion and £,92,288 of goods The average imports were valued at £,758,042, chiefly consisting of calicoes and other woven goods, raw silk, diamonds, tea, porcelain, pepper, drugs, and saltpetre In 1772, the sales at the India House reached the total value of 3 millions sterling, the shipping owned by the Company was 61,860 tons From 1760 onwards, the Custom House returns of trade with the East Indies are given in Macpherson's History of Commerce But they are deceptive for comparative purposes, as they include the trade with China as well as with India

In 1834, when the Company's monopoly of trade with China Statistics as well as with India ceased, the exports from India were valued for 1854 at £19,674,000, and the imports at £2,576,000 Shortly after

2 N

<sup>1</sup> The history of the early European settlements in India has been already dealt with in chapter are pp 356-377

Inland duties abolished, 1836-48 that date, trade was freed from many vexatious restrictions. Inland duties were mostly abolished in Bengal in 1836, in Bombay in 1838, and in Madras in 1844, the inland sugar duties in 1836 and the inland cotton duties in 1847. The navigation laws were repealed in 1848. The effect of these reforms, and the general progress of Indian commerce, may be seen in the table below. It exhibits the foreign trade of the country, in millions sterling, for each of the nine quinquennial periods between 1840 and 1884.

Before, however, entering on the items of Indian trade, the method which has been adopted in dealing with them ought to be explained. Many of those items may be regarded as agricultural productions, and as manufactures or native industries, as well as articles of export or internal trade. In such cases it has been deemed best to deal with them in each of these aspects, even at the cost of repetition. Thus cotton is treated of alike in the chapter on agriculture, and in those on trade and on manufactures. This plan will be most convenient to those who wish to consult the individual chapters, without the necessity of reading the whole volume.

FOREIGN TRADE OF INDIA FOR FORTY-HAVE YEARS, CLASSIFIED ACCORDING TO QUINQUENTIAL PLRIODS, IN MILLIONS STERLING

		1 + 1115		Ex o is	
Pr ki 205					·
	Vanufa turc	Total Merch indise	Treasure   R iw	Total Merch indise	licisure
				-	-
1340-44	3 19	769	274 - 31	14/12	0.48
184 49	3 75	9 14	307 1113	1 ×3	1 32
18-0 54	5 15	1105	47) 311	_J 10	1 00
10-5-59	6 94	12 58	11 27 , 11	25 (5	0 92
1 150-64	10 92	23 97	170, 1770	4, 17	10-
1865 69	15 74	31 70	17 (2 771	7 100	180
1070-74	17 30	33 04	1741	-7 1	1 70
1675-79	19 29	38 <sub>3</sub> 6	(31 11	6, 13	_ Si
1080-84	22 48	47 95	1261 14~,	79 ( 7	1 26
	<u>'</u>	<u> </u>			·
Average in millions teriing	} 11 67	24 27	9 72 10 75	<b>‡</b> 2 15	1 36

Steadire 5 of its growth

The preceding table shows a rapid and steady growth, which only finds its parallel in the United Kingdom. The exceptional imports of silver from 1855 to 1859 were required to pay for the Mutuny, those from 1859 to 1864 represent the

price of the cotton sent to Manchester during the American war

Before examining in detail the history of some of the chief staples of trade, it may be convenient to give in this place, as an illustration of the steady growth of Indian foreign trade, the Indian statistics of three years, 1877-78, which was a year of inflation trade in 1878 despite the incidence of famine in Southern India, of 1882-83, and of 1884-85 In 1877-78, the total foreign seaborne trade exceeded 126 millions sterling in value The transactions on behalf of Government, such as stores, equipments, and munitions of war, show an import of £2,138,182, and an The imports of merchandise were export of £36,615£,39,326,003, and of treasure £17,355,460, total imports, £56,681,463 The exports of merchandise were £,65,185,713, and of treasure £,2,155,136, total exports, £,67,340,849

These figures exhibit an excess of exports over imports Excess of amounting to £10,659,386, and an excess of treasure im-exports. ported to the amount of £15,200,324 By far the larger share of the trade of 1878, amounting to 61 per cent, was conducted with the United Kingdom, next came China, with 13 India's per cent, and then the following countries in order —France, chief customers Straits Settlements, Ceylon, Italy, United States, Mauritius, Austria, Persia, Arabia, Turkey, Egypt, Austrilia, Aden, East Coast of Africa 1 he total number of vessels that entered and cleared in 1877-78 was 12,537, with an aggregate of 5,754,379 Indian tons, or an average of 459 tons each Of the total tonnage, 76 shipping per cent was British, 7 per cent British Indian, and 15 per cent foreign, American, Italian, and French being best represented

The total value of the Indian foreign seaboard trade in Indian 1882-83, including merchandise, treasure, Government stores, 1882 83 etc, exceeded 150 millions sterling, or 24 millions in excess of the total value of the trade in 1877-78 The imports of private inerchandise amounted to £,50 003,041, and of treasure to £13,453,157, total private imports, £63 456,198, or £6774735 above the imports of 1877-78 The exports of merchandise amounted to £83,400 865, and of treasure to £080,859, total exports, £84,381,724 or £17,040 875 above the exports of 1877-78 Excess of exports over imports in 1882-83 (exclusive of Government transactions), £20,925,526 The Government transactions, such as stores, equipments, munitions of war, railway plant, etc., show an import of £2,092,670, and an export of £,145,458, including £61,200 of Government treasure

in the latter class

Suez Canal trade, 1882-83

Of the private imports, £47,172,542, or 743 per cent, came in 1882 tia the Suez Canal, and £16,283,656, or 257 per cent, by other routes. Of the exports, £44,438,288, or 527 per cent, went the Canal, and £39,943,436, or 473 per cent, by other routes. Of the total import and export private trade, aggregating £147,837,922, £91,610,830, or 619 per cent, passed through the Suez Canal, and £56,227,092, or 381 per cent, by other routes. The total number of sailing and steam vessels that entered and cleared British Indian ports from foreign countries in 1882–83, was 11,715 with an aggregate burthen of 7,071,884 tons, or an average of 513 tons each. Of the total shipping, 4257 vessels with a total of 5,366,770 tons were returned as British, 2525 with 361,189 tons as British Indian, 1834 with 1,168,293 tons as foreign, and 3099 with 175,632 tons as native craft, in 1882–83

Indian trade in 1884–85

The figures for 1884-85 show a steadily increasing trade In that year, the total value of the private sea-borne foreign export and import trade was returned at over 152 millions, or 26 millions over the total sen-borne trade in 1877-78 and of 2 millions over that of 1882-83 The imports of private merchandise in 1884-85 amounted to £53,147,919, and of treasure to £13,878,841, total private imports, £67,026,760, or £10,345,297 in excess of the imports of 1877-78, and £3,570,562 in excess of those for 1882-83The exports of merchandise amounted to f83115.443, and of treasure to £1,885,679 total private exports, £85,001,122 or  $f_{17,660,273}$  over the exports of 1877-78, and of £619,398 over those for 1882-83 Excess of exports over imports in 1884-85, £17,974,362 The Government imports in the shape of stores, materials or war, railway plant, treasure, etc., amounted to  $f_{2,563}$  111, and the exports to £,138,007

Suez Can-l trade, v 1884-85

Of the private trade, merchandisc and treasure to the value of £51,605,827, or 76 99 per cent of the imports, were, in 1884, imported via the Suez Canal, while £47,530,200, or 55 9 per cent of the total exports, were exported by the same route. Of the total import and export private trade in 1884-85, £99,136,025, or 65 2 per cent, passed through the Suez Canal, and £52,891,855, or 34 8 per cent, proceeded by other routes. The total number of sailing and steam vessels that entered and cleared British Indian ports with cargoes from and to foreign countries in 1884-85, was 8222, with an aggregate burthen of 5,814,904 tons, or an average of 707 tons each

Statistics are not yet (July 1885) available to exhibit in Distribu detail the total value and distribution of the foreign trade of Indian India in 1884-85 The figures in the following paragraphs and trade, tables refer to 1882-83, the latest year for which the final returns, as printed by command of Parliament, have been received

Of the entire trade in 1882-83, £81,770,117, or 55 31 per in 1882 83 cent, was conducted with the United Kingdom, £17,684,973, or 11 96 per cent, with China, £,7,757,818, or 5 25 per cent, with France, £5,409,804, or 3 66 per cent., with Italy, and £5,330,471, or 3 44 per cent, with the Straits Settlements, and then the following countries in order —the United States of America, 289 per cent, Austria, 217 per cent, Australia, 2 02 per cent, Ceylon, 1 85 per cent, Egypt, 1 69 per cent, Belgium, 151 per cent, Persia, 139 per cent, Cape and East Coast of Africa, 1 19 per cent, Arabia, 1 05 per cent, Mauritius, 1 00 per cent, Turkey, 0 73 per cent, and Aden. o 48 per cent

As regards imports into India, the first thing to notice is Analysis the enormous predominance of two items-cotton goods and of Indian During the forty-five years ending 1883-84, cotton goods formed 33 per cent, or exactly one-third of the total. and treasure an additional 30 per cent Next in order come metals (copper, which is largely used by native smiths, slightly exceeding iron), Government stores, including munitions of war, boots, liquor, and clothing for soldiers, and railway plant, liquors, entirely for European consumption, coal, for the use of the railways and mills, railway plant for the guaranteed and assisted companies, salt, provisions, machinery and mill-work, and manufactured silk. It will thus be seen that, with the exception of Manchester goods, no articles of European manufacture are in large demand for native consumption, but only for the needs of our English administration, and few raw materials, except coal, copper, iron, mineral oil, and salt

England's export trade to India thus mainly depends upon History of piece goods In the beginning of the 17th century, the cottonindustry had not been introduced into England The small trade British demand for cotton-goods or calicoes was met by circuitous importations from India itself, where cottonweaving is an immemorial industry. In 1641, 'Manchester Man cottons,' in imitation of Indian calicoes and chintzes, were still chester, made of wool. Cotton is said to have been first manufactured

Sentence continued on page 568

## FORLIGN SEA-BORNF TRADE OF BRILISH INDIA FOR 1882-83

1	- Imports		**
	1MPORTS		
Articles	Quantities		lue
Approved Arms Ammunition etc Books Paper and Stationery Coal Cole etc Cotton Twist and Yarn Cotton Piece-Goods and Ammunitatives Variety Varie	628 824 49 392 375 1 642,798 990	£3 378 190 21 431 872	£769 752 79 577 625 431 1,019 883
Total Cotton Goods Drugs and Medicines Dres Fruits and Vege ables	1 0421/90 990		24 810 062 391 673 206 640 211,435
Glass and Manufacti es of Gums and Masins Haidware Cutlers and Plate Horses Ivors Jewellery and Precous Stones			483 743 1 117,921 1 791 791 1 186 815 212 107 307,189 1
Ale Beer and Porter gal	1 170 554 949 160 418 169	£272 323 674 960 387 322	1
Tord L quois    Much mit vaid Will Work     Iron   Steel     Bres   cwt     O   Cr     Spe te	2 537 892 157 597 10 645 11 962 450 098 127 383	£1 870 494 103 415 64 688 1 938 376	1 334 614 1 <sub>3-</sub> 42 348
I lend Quick-user lb. Unconnernte   Iotal Metal	42 718 73 58 3 354 669	277 300 101 101 37 100 47 831	4 615 080 1 050 897
Par is and Color   Perfumers   Portchin and Earthon one   Provisions   Railway Plant and Rolling Stock     Sait ton-	3 <b>18 0</b> 6 <sub>2</sub>		234 450 63 336 170 002 1 08~ 186 1 11( 434 515 184
Sik (aw) and Direct lbs Sik Manufectures yards Total Silk,	2 386 1 50 9 671 261	201 0/11/20	2 051 021
Spice III Sugar cut- Tea, Ib Tobacco   Umbrel is	672 672 2 75 085		510 554 1 08% gpt 193 052 83 508 232 829
Wood, and Manufacture of Wool (row) Bs Wool M mufactures of yards Total Wool & Wooden Goods All Other Africes	2 781 257 6 932 779	£68 931 984 873	2 946 119 2 946 119
I otal Mercha idis I reasure,			£50 003 041 13 453 157
Total Merchandisc and freesure (Sovernment Imports			£63,456 198 2,092 670
GRAND TOLAT OF	eres tanda senenta senenta		£65 548 868

## Foreign Sea-borne Trade of British India for 1882-83

	Exports	
Articles	Quantity	Value
Coffee cwts	364 008	£1 419 131
Corr and Manufactures of	173 209	152 129
(excluding Cordage) ∫ Cotton (raw) Cotton Twist and Yarn,	6 170 173	£16 055 758 1 874 464
Cotton Manufactures Total Cotton & Cotton Goods		2 093 146 20 023 368
Drugs and Medicines Indigo cwts Other Dves (except Lac) Total Dyes (except Lac)	141 041	£3 912,997 258 436 4 171,433
Rice (including Paddy) cwte Wheat Other Gruns Total Grain	31 258 288 14,193 763 1 165 826 ————————————————————————————————————	£8 476 327 6 088 814 319 571
Gums and Resins	282 416	
Hemp and Manufactures of Hides and Skins Horns		44 236 4 444,946 181 785
Ivory and Manufactures of  Jewellery and Precious Stones  Jute (riw)  Little Manufacture of bay		
Jule Manufactures of Tyri		1 407 031
I otal Jute and Jute Goods		7 334 75
I ac (dve shell etc ) cwt Oils Opium ches Sultpetre cwt	ts   91 798	443 76
Silk (raw) Ib Silk, Vanufactures of Total Silk and Silk Goods		
Spices 1b	20 947,105	'
Sugar cwt Tea lb Tobacco	s 1 428 360	989 009 3 738 844 117 150
Wood and Minutactures of Wool (12w) Ib Wool Manufactures of Total Wool & Woollen Good	5 0,	56 370 183 348 186 18:
All Other Articles,		2 427 607
Total Merchandise <sup>1</sup> Freasure		£83 400 865 980 859
Total Merchandise and { Ireasure Government I yports	i	£84,381 72.
GRAND TOLLI OF { I NIORIS		£84 527 182

1 Viz { Indian Produce or Manufacture, £80 598 155 I oreign Merchandise 2 802 710

£83,400 865

Sentence continued from page 565]

Cotton introduced 1676

in England in 1676 Fo foster the nascent industry, a succession of statutes were passed prohibiting the wear of imported cottons, nor was it until after the inventions of Arkwright and others, and the application of steam as a motive power, had secured to Manchester the advantage of cheap production, that these protective measures were entirely removed. In the present century, Lancashire rapidly improved on her instructors. During the five years 1840–45, the annual import of cotton manufactures into India averaged a little over £3,000,000 sterling. In each subsequent quinquennial period, there has been a steady increase, until in 1877–78 the import reached the total of £20,000,000 sterling, and in 1882–83 nearly £21 500,000, or an increase of more than seven-fold in forty-four years

Cotton goods imports, 1840-83

Imports of

The importation of treasure is perhaps still more extraordinary, when we bear in mind that it is not consumed in the using, but remains permanently in the country. During the same period of forty four years, the net import of treasure, deducting export, has reached the enormous aggregate of  $358\frac{3}{4}$ millions sterling, or a fraction under £1, 8s per head of the 256 million inhabitants of British and Feudatory India. By far the larger portion of this was silver, but the figures for gold, so far as they can be ascertained, are by no means in onsiderable

Proportion of gold to silver

During the ten years ending 1875, when the normal value of silver as expressed in gold was but little disturbed, the total net imports of treasure into India amounted to just 99 millions. Of this total,  $62\frac{1}{2}$  millions were in silver, and  $36\frac{1}{2}$  millions in gold, the latter metal forming more than one third of the whole. On separating the releaports from the imports, the attraction of gold to India appears yet more marked. Of the total imports of gold, only 7 per cent was re exported, while for silver the corresponding portion was 19 per cent. Roughly speaking, it may be concluded that India then absorbed annually about 5 millions of silver, and 3 millions sterling of gold, say a total hoard of 7 to 8 millions sterling of the precious metals each year during the decade ending 1875

Gold and silver cir culation

The depreciation of silver which has since taken place has caused an increase in the import of silver, and a corresponding decrease in the export of gold. The figures since 1876 do not show the normal state of things. But even in 1877-78, when the value of silver in terms of gold touched a low point, although India drew upon its hourds of gold for export to the amount of more than 1 million sterling, she at the

same time imported 11 million, showing a net import of half a million of gold It has been estimated that the gold circulation of India amounts to 1,620,000 of gold mohars (Rs 16 to Rs 20 each), worth about three millions sterling, as compared with  $f_{15}$ 8,000,000 of silver and  $f_{2}$ 960,000 of copper addition, 10 million sovereigns are said to be hoarded in India, mainly in the Bombay Presidency, where the stamp of St. George and the Dragon is valued as a religious symbol already stated, the net accumulation of silver and gold in India, after allowing for re exports, averaged 7 millions sterling during the five years ending 1879, and rose to an average of 11 millions sterling during the next quinquennial period ending 31st March 1884

Turning to the exports, the changes in relative magnitude Analysis demand detailed notice In 1877-78, raw cotton for the first of Indian time for many years fell into the second place, being surpassed by the aggregate total of food grains In 1882-83, raw cotton had again advanced into the first place among the exports, exceeding the value of food grains by upwards of a million sterling Oil seeds show as a formidable competitor to cotton, jute nearly doubles indigo, hides and tea come close behind, while exports of cotton manufactures exceed coffee in value by upwards of half a million. The imports of sugar, in value although not in quantity, exceed the exports, the trade in raw silk is about equally balanced, while spices, once the glory of Eastern trade, were exported in 1877-78, to the value of only £,226,515, as compared with imports of spices of twice that value (£488,884) In 1882-83, spices were exported to nearly the same value as the imports, namely, exports £417,391, and imports £510,854

The export of raw cotton has been subject to excessive Export of At the close of the last century, cotton was sent to raw cotton I ngland in small quantities, chiefly the produce of the Central Provinces, collected at Mirz pur and shipped at Calcutta, or the produce of Gujarat (Guzerat) despatched from Surat In Itshistory 1805, the cotton from Surat was valued at £,108,000 In the 1805-34 same year, only 2000 bales of Tast Indian cotton were im ported into Great Britain But this figure fails to show the average, for by 1810, the corresponding number of bales had risen to 79,000, to sink again to 2000 in 1813, and to rise to 248,000 in 1818 Bombay did not begin to participate in this trade until 1825, but has now acquired the practical monopoly, since the railway diverted to the west the produce of

the Central Provinces In 1834, when the commerce of India was thrown open, 33,000,000 lbs of cotton were exported

Export of

Analysing the exports of cotton during the forty-five years raw cotton since 1840, we find that in the first quinquennial period they averaged 21 millions sterling in value, and did not rise perceptibly until 1858, when they first touched 4 millions that date increase was steady, even before the American exports were cut off by the war in 1861 During the American war, India made the most of her opportunity, although quality did not keep pace with the enhanced price. The export of raw cotton reached its highest value at 371 millions sterling in 1865, and its highest quantity at 803,000,000 lbs in 1866

and since 1865

Thenceforth the decline has been constant, although somewhat irregular, the lowest figures both of quantity and value being those of 1878-79, when the exports amounted to 2 966 569 cuts, valued at £7,914,091 The principal feature of the trade in 1877-78 was the comparatively small amount shipped to the United Kingdom, and the even distribution of the rest among continental ports Indian cotton has a short staple, which is ill-suited for the finer counts of varn spun in the Lancashire mills In 1877-78, out of a total of nearly 3½ million cwts less than 1½ million cwts was consigned to England, of the remainder, France took 611,000 cwts, Italy 434,000, Austria, 407 000, China, 209,000, and Germany, 109,000 The export of raw cotton in 1878-79 amounted in value to £7 914 091, and of twist and cotton goods, to £,2,581,823 In 1882-83 out of a total export of over 6 million cwts of raw cotton, 2,865,065 cwts were shipped to the United Kingdom, 937 234 cwts to Italy, 764,550 cwts to Austria, 585,766 cwts to France, 333,708 cwts to Belgium, 114,412 cwts to Germany, and 364,519 cwts to Hong-Kong In 1882-83, raw cotton was exported to the value of £,16,055,758, cotton twist and yarn, £1,874,464, and cotton manufactures, £2,093,146 Total cotton exports, £, 20 023,368

Export of Įuċ,

Second in importance to cotton as a raw material for British manufacture comes jute At the time of the London Exhibition of 1851, jute fibre was almost unknown, while attention was even then actively drawn to rhea or China grass, which remains to the present day unmanageable by any cheap process From time immemorial, jute has been grown in the swamps of Eastern Bengal, and has been woven into coarse fabrics for bags and even clothing. As early as 1795, Dr Roxburgh called attention to the commercial value of the plant, which he

grew in the Botanical Gardens of Calcutta, and named 'jute,' after the language of his Orissa gardeners, the Bengali word being  $p\acute{a}t$  or koshta In 1828–29, the total exports of jute in 1828, were only 364 cwts, valued at £62 From that date the trade steadily grew, until in the quinquennial period ending 1847–48 in 1848 the exports averaged 234,055 cwts The Crimean war, which cut off the supplies of Russian flax and hemp from the Forfarshire weavers, made the reputation of jute Dundee forthwith adopted the new fibre as her speciality, and the Bengal cultivators as readily set themselves to meet the demand

Taking quinquennial periods, the export of raw jute rose Later from an average of 969,724 cwts in 1858-63 to 2,628,100 cwts in 1863-68, and 4,858,162 cwts in 1868-73. The highest figures reached prior to 1882 were in the year 1872-73, with 7,080,912 cwts, valued at £4,330,759. A falling off subsequently took place, partly owing to the competition of the weaving-mills in the neighbourhood of Calcutta, but the trade continued on a permanent basis. By far the greater bulk of the exports is consigned to the United Kingdom, and a large proportion direct to Dundee. In 1877-78, out of a total of 5,450,276 cwts, 4,493,483 cwts were sent to the United Kingdom, 845,810 cwts to the United States, 110,983 cwts to other countries, chiefly Frince, which has prosperous weaving-mills at Dunquerque.

In 1882-83 the exports of raw jute had increased to and 10,348,909 cwts valued at £5,846,926, being considerably 1882 83 higher both in quantity and value than the figures for any previous year. Of this quantity 7,834,136 cwts valued at £4,709,299 were exported to the United Kingdom, 2,002,731 cwts valued at £814,847 to the United States, 184 508 cwts valued at £116,042 to Germany, 147,644 cwts valued at £59,454 to Austin. Jute manufactures to the number of 60,737,654 gunny bags, valued at £1,431,581, were exported in 1882-83, Australia taking nearly one-third of the total number of bags, and upwards of one-half of the total value. Including 4,601,247 yards of gunny cloth, and 1346 cwts of rope and twine, the total export trade of raw and manufactured jute amounted in 1882-83 to £7,334,757 in value.

The export of raw jute is almost monopolized by Calcutta, although Chittagong, which is nearer the producing Districts, is beginning to take a share in the business

The export of grain, as already noticed, reached in 1878 a Export higher total than that of cotton, although cotton again has of food taken the first place in exports. The two staple cereals are

Rice

rice and wheat Rice is exported from British Burma, from Bengal, and from Madras The latter Presidency usually despatches about 21 million cwts a year, chiefly to its own emigrant coolies in Ceylon, but in 1877-78, this trade was almost entirely checked by the famine In that year, besides supplying the necessities of Madras, Bengal was able to send nearly 6 million cwts to foreign ports The Burmese rice is chiefly exported for distillation or starch, the Bengal exports are chiefly intended for food, whether in Ceylon, the Mauritius, the Straits Settlements, the West Indies, or Europe

Burmese 1 ce

From the point of view of the English market, rice means almost entirely Burmese rice, which is annually exported to the amount of about 20 million cwts, valued at over 5 millions sterling In the Indian tables, this is all entered as consigned to the United Kingdom, although, as a matter of fact, the rice fleets from Burma only call for orders at Falmouth, and are there diverted to various continental ports Burmese rice is known in the trade as 'five parts cargo rice,' being but imperfectly husked before shipment, so that it contains about one part in five of paddy or unhusked rice. It has a thick, coarse grain, and is principally utilized for distillation or for conversion into starch

Rice trade 12 1878,

In 1877-78, the exports of rice to the United Kingdom amounted to 10,488,198 cwts, being slightly less than the average,-but about half of this total is known to be reexported to foreign countries, the direct exports to the Continent were only 68,839 cwts to Germany, and 20,117 to Siam and Cochin China supply the wants of China, but India has a practical monopoly of the Furopean market In 1878-79, after India had begun to recover from the famine. although prices continued to rule high, the total export of rice was 21\frac{1}{2} million tons, valued at 9 millions sterling (£8 978.951)

The total foreign exports of rice and paddy from British in 1882 83 India in 1882-83 amounted to 31,258,288 cuts, valued at £8,476,327 Of the total quantity, 12,381,486 cwts, valued at £3,211,398, went to the United Kingdom, although, as explained above, a large proportion is re-exported to other European countries The other countries largely consuming Indian rice were—the Straits Settlements, 4,092,521 cwts, Egypt, 2,973,703 cuts, Ceylon, 2,883 534 cuts, Malta, 2,732,442 cwts, Mauritius, 1,227,671 cwts, Arabia, 832,574 cwts, South America, 786,557 cwts, France, 605,735 cwts, Italy, 165,662 cuts, Germany, 124,447 cuts, etc total exports of 31,258,288 cwts, 21,330,587 cwts., or 68 2 per cent, were exported from British Burma, 7,855,151 cwts, or 25 I per cent, from Bengal, 1,448,540 cwts from Madras, 552,537 cwts from Bombay, and 71,473 cwts from Sind

An export duty is levied on rice in India at the rate of Export 3 ánnás per maund, or about 6d per cwt A similar duty duty on on wheat was repealed in 1873, and that trade has since conspicuously advanced

In 1874-75, the export of wheat was about I million cwts Export of Forthwith it increased year by year, until in 1877-78 it ex-wheat ceeded 61 million cwts, valued at nearly 3 millions sterling In 1878-79, the quantity fell to 1 million cwts, valued at  $f_{520,138}$ , owing to the general failure of the harvest in the producing Districts But as railways open up the country, and the cultivators find a steady market in England, India may, as already mentioned, some day become a rival to America and Russia in the wheat trade of the world Punjab is a great and rapidly developing wheat-growing tract in India, but up till recently the supplies have chiefly come from the North-Western Provinces and Oudh, being collected at Cawnpur, and thence despatched by rail to Calcutta indicated below. Bombay has now taken the place of Calcutta in the exportation of wheat, the opening of the Rajputána-Malwa Railway having put Bombay in direct communication with the Punjab wheat tract In 1877-78, out of the Wheat total of 6,340,150 cwts, Bengal exported 4,546,062 cwts, trade in 1878, Bombay 1,159,443, and Sind 607,470 The chief countries of destination were—the United Kingdom, 5,731,349 cwts, the Mauritius, 154,888, and France, 116 674

Since 1877-78, the wheat export trade has rapidly extended, and in the year 1882-83 it stood at 14,193,763 cwts, valued in 1882 83 at £6,088,934 Nearly one-half of the total exports, or 6,575,160 cuts, went to the United Kingdom, 3,567,712 cwts to France, 1,458 898 cwts to Belgium, 799 550 cwts to Egypt, 578,246 cmts to Holland, 176,063 cmts to Italy, 494 098 cwts to Gibraltar, and 163,358 cwts to Malta. Of the total wheat, Bombay exported 6,957,752 cwts, or 492 per cent, Calcutta, 4,439,405 cwts, or 314 per cent, and Karachi, 2,732,275 cwts, or 19 3 per cent, the small balance being sent from Madras and Rangoon

It is said that Italy is beginning to utilize the hard, white Indian wheat for the manufacture of macaroni

Oil-seeds were freed in 1875 from their former export duty Exports of of 3 per cent ad valorem During the ten previous years, the oil seeds in average annual export was only about 4 million cwts. but

Oil seeds ın 1877 78

the fiscal change, coinciding with an augmented demand in Europe, has since trebled the Indian export In 1877-78, the export of oil-seeds amounted to 12,187,020 cwts, valued at 71 millions sterling Of this, Bengal contributed 7,799,220 cwts, and Bombay 3,179,475 cwts Linsced and rape are consigned mainly to the United Kingdom while France takes almost the entire quantity of the or gingelly In 1879, the export of oil-seeds fell to 71 million cwts, valued at

In 1882-83, exports of oil-seeds had again in 1882 83 £,4,682,512 increased to 13,147,982 cwts, valued at £,7 205,924, of which 5,898,383 cwts, valued at £3 397,840, went from Bombay, and 5,592,896 cwts, valued at £2817,140, from Bengal The principal countries of destination were—the United Kingdom, 6,409 134 cwts France, 3 923 964 cwts, Belgium, 1,001,164 cwts, Egypt, 631,388 cwts Italy 445 773 cwts, United States, 321,688 cwts and Holland, 254,014 seeds, British India exported in 1882-83, 3,644,632 gallons of expressed oil, and 201,116 cwts of oil cake, of the total value of £,445,529 In actual amount, although not in relative importance,

Exports of indigo in 1377 78,

1382 S3.

indigo holds its own, notwithstanding the competition of aniline dyes The export of 1877-78 amounted to 120,605 cwts, valued at £3,494,334 Of this total, Bengal sent 99,402 cuts, and Madras 16 899 cuts In 1878-79 the export of indigo amounted to 105,051 cwts, valued at £2,960,463 In 1882-83, the exports of indigo amounted to 141,041 cuts, of the value of £3,912,997, of which 99 715 cwts, valued at £3 023,540, were sent from Bengal, and 33 474 cwts valued at £763,096, from Madras The most noticeable feature in this trade is the diminishing proportion sent direct to England, and the wide distribution of the remainder In 1882-83, only 60,645 cwts were consigned direct to the United Kingdom,

115 des int t on,

27,285 cuts, or about one fifth, to the United States, 16,076 1882-83 cuts to Egypt, thence probably reshipped to Europe, 15,513 cwts to Irance, 8391 cwts to Austria, 6077 cwts to Persia, 4033 cuts, to Turkey and 1607 cuts to Italy

Safflower

Of other dyes, the export of safflower has fallen off, being only in demand in the United Kingdom, and as a rouge in China and Japan, the export in 1877-78 was 3698 cwis, valued at £14,881 In 1882-83, the exports of safflower amounted to 3008 cwts, value £9203 The export of myrotialams, on the other hand, was merely stunulated by the Russo-Jurkish War, which interrupted the supply of valonica and galls from Asia Minor The quantity rose from 286,350 cwts

Myro balams. in 1875-76 to 537,055 cwts in 1877-78, valued in the latter year at £230,526 In 1882-83, the exports of myrobalams were 471,167 cwts, value £184,697 Practically the whole is sent to the United Kingdom Turmeric exports amounted Turmeric to 146,865 cwts in 1877-78, valued at £123,766, of which the United Kingdom took about one half In 1882-83, the exports of turmeric had dropped to 63,570 cwts, valued at £37,207 Lac dye, like other kinds of lac, shows a depressed trade, the Lac exports in 1877-78 having been 9570 cwts, valued at £29,009 In 1882-83, the exports of lac-dye had fallen to 3927 cwts, valued at £4610, the whole of which was sent to the United Kingdom and the United States

No Indian export has made such steady progress as tea, Exports of which has multiplied more than seven-fold in the space of tea. fifteen years In 1867–68, the amount was only 7,811,429 lbs, by 1872–73, it had reached 17,920,439 lbs, in 1878–79, without a single step of retrogression, it had further risen to 34,800,027 lbs, valued at £3170,118, and in 1882–83 to a total of 58,233,345 lbs, of the value of £3,738,842 Until recently, Indian tea was practically confined to the United Kingdom, but markets have recently been opened out in Australia and the United States The exports to the United Kingdom in 1882–83 amounted to 54,108,114 lbs, to Australia 2,772,461 lbs, and to the United States 676,507 lbs

Indian tea his now a recognised position in the London Indian and market, generally averaging about 4d per lb higher in China tea value than Chinese tea, but it has failed to win acceptance in most other countries, excepting Australia. Its growing importance as compared with Chinese tea appears from the following figures. In 1872, the imports of Indian tea into England were to those of Chinese tea as I to 97, in 1874, as I to 75, in 1876, as I to 56, and in 1878, as I to 47

The exports of coffee from India are stationary, if not Coffee declining. The highest amount during the past fifteen years was 507,296 cwts in 1871–72, the lowest amount 298,587 cwts in 1877–78, valued at £1,338,499. In 1878–79, the export of coffee was 342,268 cwts, valued at £1,548,481. The export of coffee had slightly increased by 1882–83 to 364,008 cwts, but showed a decrease in value to £1,419,131.

Among manufactured goods, cotton and jute deserve notice, Export of although by far the greater part of the produce of the Indian cotton mills is consumed locally The value of Indian cotton-manufactures, tured goods exported in 1877-78 was £1,142,732, in 1879-80, in 1877 78, £1,644,125, and in 1882-83, £2,093,146 The exports of

Export of cotton manufactures

twist and yarn, spun in the Bombay mills, increased from 3 million lbs in 1874-75 to 15½ million lbs in 1877-78, valued at £682,058 The chief places of destination were - China, 13,762,133 lbs, Aden, 1,181,120 lbs. and Arabia, 393,371 lbs The export of twist and yarn in in 1882 83 1878-79 was valued at £937,698 By 1882-83, the exports of twist and varn, nearly all from Bombav, had increased to 44,859,175 lbs., value £1,874 464, chiefly to China, Japan, Indian-made piece-goods belong to two Tava, and Aden classes Coloured goods, woven in hand-looms, are annually exported from Madras to Ceylon and the Straits, to the value of about £230,000, the quantity being about 8 million yards, while in 1877-78, grey goods from the Bombay mills were sent to Aden, Arabia, Zanzibar, and the Mekran coast, amounting to over 10 million yards, and valued at £141,509 By 1882-83, the export of grev goods from Bombav had increased to 41,799,370 yards, value £,466,260

Tute manufactures consist of gunny bags, gunny cloth, and

Exports of ju c manu facture-

Gunny-

rope and twine, almost entirely the produce of the Calcutta mills In these, the value of the exports tends to increase faster than the quantity, having multiplied nearly four fold in the five years ending 1882-83 In 1877-78, the total export of tute manufactures was valued at £,771,127, and in 1879-80 at £,1 098,434 Gunny bags, for the packing of wheat, rice, and in 1877 78, wool, were exported in that year to the number of more than 26½ millions, valued at £729,669 Of this total, £298,000 (including by far the most valuable bags) was sent to Australia. £,162,000 to the Straits, £,80,000 to the United States, £77,000 to Egypt, £32,000 to China, and £81,000 to other countries, which comprises a considerable quantity destined In 1878-79, the export of gunny-bags had for England. increased to 451 millions. Of gunny cloth in pieces, nearly 3 million yards were exported, almost entirely to the United States, in 1878-79, these exports had increased to upwards of 43 million yards Of rope and twine, 4428 cwts were exported in 1877-78, valued at £5443

County hass ın ĭbd2 83

By 1882-83, the number of gunny bags exported had increased to 66,737,654, of a value of £1,431,584, the prin cipal countries to which they were sent being Australia, China, the Straits Settlements, and the United States Gunny cloth to the extent of 4,601,247 yards was also exported in the same year to the value of £55,802, as were also rope and twine, 1346 cwts, valued at £,1872 The total export of Indian jute manufactures in 1882-83 was valued at £1,487,831, or double the figure (£771,127) for 1877-78

The following statistics, being taken from Indian returns, do Countries not in all cases show the real origin of the imports or the India ultimate destination of the exports, but primarily the countries trades with which India has direct dealings London still retains its pre eminence as the first Oriental mart in the world, whither buyers come from the other countries of Europe to satisfy their To London Germans come for wool, Frenchmen for jute, and all nations for rare dyes, spices, and drugs

The opening of the Suez Canal restored to the maritime cities of the Mediterranean a share of the Eastern business which they once monopolized But, on the other hand, the advantage of prior possession, the growing use of steamers, and the certainty of being able to obtain a return freight, all tend to favour trade with England, carried in English bottoms As the result of these conflicting influences, the trade of India with the United Kingdom, while in actual amount it remains pretty constant, shows a relative decrease as compared with the total trade

Taking merchandise only, the average value of English exports and imports during the two years 1867-69 amounted to slightly more than 58 millions sterling, out of a total of nearly 86 millions, being 66 per cent Ten years later, the India's average value of English trade for 1877-79 was still 58 trade with millions, but the total value had risen to 100 millions, and the proportion had therefore fallen to 563 per cent In 1882-83, the total value of the English private imports and exports of merchandise had risen to 753 millions, but the proportion to the total trade of a little less than 1331 millions (excluding Government stores and private and Government treasure) had fallen to 56 7 per cent Next to the United Kingdom comes China, with an Indian trade of about 151 millions (imports and exports), or 111 per cent Of this, nearly 111 millions represent opium, the only other articles which China takes from India with being raw cotton, cotton twist, and gunny-bags. In return, China sends silver, copper, raw silk and silk goods, sugar and tea, the balance of trade being adjusted through England is said that Chinese tea is now only consumed in India by natives, or sent across the frontier into Central Asia annual quantity imported into India is about 21 million lbs, and the price is extremely low

The trade with the Struts may be regarded as a branch India's of the Chinese trade The exports are valued at over 32 with the millions sterling, of which more than a half consists of opium, Straits, the rest being principally made up by rice and gunny-bags. The imports are tin, areca-nuts, pepper, and raw silk,

with Ceylon,

with

valued altogether at less than one-half of the exports The trade with Ceylon is merely a form of coasting trade, large quantities of rice being shipped in native craft along the Madras coast to feed the Tamil coolies in that island are hardly a sixth of the exports in value With Mauritius. rice is exchanged for sugar to a large amount

Mauritius India's trade with France,

Of European countries, France and Italy alone deserve notice beside Figland In 1877-78, the Indian exports to France reached the large total of nearly 6 millions sterling, consisting chiefly of oil seeds (rape and gingelly), indigo, cotton, silk, and coffee The direct imports in the same year were valued at only £451,000, principally apparel and millinery, brandy and wines, and silk goods, but the same articles are also sent in considerable, although unascertained, quantities In 1882-83 the exports to France amounted to £7,207,962, and the direct imports to £484,367 with Italy, trade with Italy shows a steady increase, the Indian exports to Italy having risen from £1,100,000 in 1877-78 to £3,383,507 in 1882-83 and the return imports from £ 250,000 to £444 433 The exports are cotton, silk, oil seeds (sesamum), and hides, the imports—corals, glass beads and false pearls, spirits and wines, and silk goods

India trade with the United States,

The trade with the United States comes next to that with Italy, aggregating a total for exports and imports of  $f_{4,277,560}$ The exports are indigo, hides, raw jute and gunny bags, lac, saltpetre, and linseed, the imports are almost confined to mineral oil. In 1878-79 the import of ice (formerly an im portant item in the trade with the United States) fell off greatly, under competition from local manufacture at Calcutta and Bombay, and it has now entirely ceased, while the imports to India of American kerosene oil rose to 3 million gallons in 1878-79, and to the enormous quantity of 20 million gallons ın 1882-83

with Australia

The trade of India with Australia was formerly limited to the export of rice, gunny-bags, and castor oil, and the import of copper and horses A little coal is sent from Australia, and a little coffee from India Hitherto Australia has preferred to drink Chinese tea, but a considerable development of trade in this and other Indian products has taken place since the Melbourne and other Colonial Exhibitions The total exports to Australia in 1882-83 aggregated £1,088,918, return imports, £476,591

The following tables summarize the private foreign tride of India in 1877-78 and 1882-83 -

DISTRIBUTION OF FOREIGN LANDL OF INDIA IN 1877-78 AND 1882-83 (Exclusive of Government Stores, and of Government and Private Treasure)

	 	18 7-78	-78			1882-83	-83	
	20165	F	lotd	Percentage of value on grund total	Imports	Exports	Total	Percentage of value on grand total
EUROPE— United Kingdom, France.	£ 32 211, 303	29 613,606	606,848,19	50	40,365 926	35 429,872	A 79,5 798	567
Italy, Austra, Beigum,	349,228 113,078 119	1,465,891 2,465,891	2 2 2 2 2 3 4 10 2 2 3 4 10 2		444 433 444 433 270 395 7 ,434	3,383,507 2,602,556 2,151,727	7,092,329 3,827,940 2,872,951 30,961	0 0 1 20
Other European countries Total,	33 173 500	40 050 624	964 080	01	135 681	53 191,569	2,551,626 94 970 805	712
AFRICA— ESPPt, Mammus, Mammus, Eastern coast ports Other African ports and islands,	42,461 642 471 217 964 3,40 <sub>5</sub>	577 752 7 148,917 281 080 157 599	620 213 1,790 688 499 944 161 004	17.5	44 c84 883,706 325,421 9 318	2,113 167 592 669 582 700 400 813	2,157,251 1 475 375 908,121 410,131	116 17
Total,	108 906	2,164 648	3,070 949	5.0	1 261 529	3 689 349	4 950 878	3.7
Awrence - United Star's, Uther American countries	979,717	1,932 727	2,272 444 339 875	. s	934 342	3,343 ar8 4r8 868	4,277 560	8. 2.8.
Total,	280 425	2,271 894	2,552 319	2 4	938 442	3,762,086	4 700,528	3.5
Asta-   Sharts Settlements, Straits Settlements, Persa, Arabia, Arabia, Adea, Other Astatic countries,	1 423 674 2 079,702 530 555 469 507 323 692 161 046 679 303	12,743 149 2,581,730 2,544 516 873 193 683,394 330 643 486 843	14 166 822 3,661 438 3,075 971 1 342 700 1,006 626 401 689 1,166,146	21 82 84 H S 20 62 G 22 H	2 072,037 1 5 5,692 573,775 573,620 282 442 69 588	13 160 105 1,638 734 1,322 616 1,223 878 575 672 575 672	15,232,142 5,235,426 1,966 391 1,797 498 1,058,711 645 260	ቸውኮዘ ዘ ቀውኮሌው የነጋ
Total,	4 667,478	20 24 3 014	54 9TO,494	239	5 547,243	21,668 942	27 216 185	20.4
At STRAI ANIA— Australas, including Tasmania and New Zeal and,	298,298	455 534	753 849		476 591	1,088 918	1,565,309	1 2
Grand Total,	39,326,02	65 185 714	316,511,716	100 0	50,003 041	83 400 864	133 403 905	100 0

The opening of the Suez Canal in 1869, while it has stimu-Trade vid lated every department of trade into greater activity, has not the Suez materially changed its character The use of the Canal implies steam power In 1871-72, the first year for which statistics are available, the total number of steamers trading with India which passed through the Canal was 422, with a tonnage of 464,198 Every subsequent year shows an increase until the great fall in trade in 1878-79 In 1877-78, the number of steamers passing through the Canal was 1137, with a burthen of 1,617,839 tons, or 64 per cent of the total steam tonnage Although there was a considerable falling off in the two follow ing years, the Canal trade speedily recovered itself, and in 1880-81, 1459 steamers of 2,133,872 tons passed the Canal The highest figures hitherto reached were in 1881-82, when 1989 steamers of 2,887,988 tons passed the Canal In the following year, 1882-83 the number of Canal steamers was 1645 of 2,585,920 tons

As might be anticipated, the imports to India, being for the most part of small bulk and high value, first felt the advantages of this route In 1875-76, 85 per cent of the Growth of imports from Europe and Egypt (excluding treasure) passed the Canal through the Canal, but only 20 per cent of the exports The export trade, however, has rapidly increased, showing that such bulky commodities as cotton, grain, oil-seeds, and jute now largely participate in the advantages of rapid transport afforded by the Canal In 1877-78, the import trade zu the Canal amounted to 74 per cent of the total imports into British India, and the Canal exports to 36 per cent of the total exports In 1882-83, while the import trade tia the Canal remained stationary at 74 per cent, the proportion of Canal exports had increased to 52 per cent The proportion of both import and export trade passing through the Suez Canal has increased from 45 per cent in 1877-78 to 61 per cent in 1882-83 The Canal has reduced the length of the voyage from London to Calcutta by about thirty-six days The route round the Cape was more than 11,000 miles, and occupied nearly three months, that through the Canal is less than 8000 miles, and takes from 30 to 45 days

Sir R Temple, when Finance Minister in 1872, drew up a Sir R valuable State Paper, in which he placed in a clear light the Temple or the balance various means by which the apparent excess of exports over of Indian imports is liquidated. His conclusions were based on special trade materials reaching from 1835 to 1871 They are therefore

summarized here without attempting to extend them to the period which has since elapsed. The balance of trade during recent years has already been dealt with at pp 558-0

Indian commerce for thirty SIX Years

During the thirty six years between 1835 and 1871, the value of merchandise exported from India amounted to  $f_{1,012,000,000}$ , say one thousand millions sterling, the value of merchandise imported into India amounted to  $f_{583,000,000}$ , showing an excess of  $f_{429,000,000}$  in the exports The value of treasure imported in the same period was  $f_{312}$  000,000, against  $f_{37,000,000}$  exported, being a net import of  $f_{.275,000,000}$  Deducting this from the excess of merchandise exports, a balance of £,154,000,000 has to be accounted for otherwise than in the ordinary operations of The first item to be considered is freight come all payments made in England, whether by the Indian accounted Government or by private persons resident in India During the thirty six years taken, the aggregate amount of payments in England on Government account (now represented by the Secretary of State's bills) amounted to £,113,000,000 bills are drawn to meet charges due in England under such heads as civil and military pensions, interest on debt and on railway capital, military stores, etc., and they are bought by bankers or merchants, who require to meet their own payments in India They operate, financially, as if treasure had been sent to India and thus reduce the apparent balance of trade at one stroke from £,154,000,000 to £,41,000,000 Private re The remaining item to be considered is the remittances to England on private account, which it is impossible to ascertain with any pretension to accuracy In 1872, this item was estimated at  $f_{3,500,000}$  a year, but in former years it had been much less, and it is now probably much more includes such divers matters as the savings of officials, profits of trade and planting, interest on capital invested, etc. 'I ogether with freightage, it would make up the balance of £41,000,000 yet unaccounted for, and thus finally equalize and account for

Balance from Chinese tracle

The phenomena of the trade between India and China are to be explained on the same principles In 1872-73, the total exports from India to China were valued at £12,074,347, to which opium alone contributed £,10,529,673 The total imports from China were valued at only £1,355,171, showing an excess of £10,719,176 in exports, for which India receives no direct return from China. In this case, China pays her debt to India by the excess of her exports to Lugland, which

the balance of India's foreign trade

The Lalance, how for

Govern ment re mittances

mi tances

are there placed to the credit of India. During the twenty years between 1852 and 1871, the aggregate balance of trade in favour of China in her dealings with England amounted to £112,000,000 This amount was available to settle China's equally unfavourable balance with India, and was in fact paid by China for Indian opium, as certainly as if the opium had been sent to China via England It is evident, therefore, that if the Chinese were to greatly increase their imports of English goods, the exchanges of India might be seriously affected

The foreign trade of India is practically monopolized by Coasting five ports, namely, Calcutta, Bombay, Madras, Rangoon, and trade Karáchi, but the entire seaboard along both sides of the peninsula is thronged by native craft, which do a large coasting In the Gulfs of Kachchh (Cutch) and Cambay, on the Malabar coast, and in the southern Districts facing Cevlon. a large portion of the inhabitants are born sailors, conspicuous alike for their daring and for their skill in navigation 1873-74, which may be regarded as a normal year, the total number of vessels engaged in the coasting trade which cleared and entered was 294,374, with an aggregate of 10,379,862 tons, the total value of both coasting exports and imports was £34,890,445 Of the total number of vesse's, 280,913, with Statistics £31,890,445 Of the total number of vesses, 200,913, with of coast 4,843,668 tons, were native craft Bombay and Madras divided trade and between them nearly all the native craft, while in Bengal and shipping, Burma, a large and increasing proportion of the coasting traffic 1874, is carried in British steamers

In 1877-78, the year of famine, the number of ships in in 1878 creased to 319,624, the tonnage to 15,732,246 tons, and the value to £67,814,446 By far the largest item was grain, of which a total of 1,137,690 tons, valued at 13 millions sterling, was thrown into the famine-stricken Districts from the Next in importance came raw cotton and cotton Staples of goods The trade in raw cotton in 1877-78 amounted to the coast trade, 387,438 cwts., valued at £957,900, much of which was merely 1878 transhipped from one port to another within the Bombav Presidency Cotton twist and yarn in the same year amounted to 17,425,993 lbs, valued at £965 038, of which the greater part was sent from Bombay to Bengal and Madras The total value of the exports coastwise of cotton piece-goods was £620,866, including about 24 million yards of grey goods sent from Bombay to Bengal and to Sind in nearly equal proportions, and about 2 million yards of coloured goods from Madras Stimulated by the activity of the grain trade caused by the

Indian coasting trade, 1877-78 famine, the exports of gunny-bags from Calcutta coastwise rose to a total value of nearly £960,000. The trade in arecanuts in 1877-78 amounted to nearly 44 million lbs, valued at over £500,000. Burma consumes most of these, obtaining its supplies from Bengal, while Bombay gets considerable quantities from Madras, from the Konkan and Goa, and from Bengal. Sugar (refined and unrefined) figures to the large amount of £900,000 in 1877-78, of which the greater part came from Bengal. The movements of treasure coastwise showed a total of just 5 millions sterling, being exceptionally augmented by the conveyance of silver to Burma in payment for rice supplied to Madras

Coasting trade in 1875-79, and in 1882-83

The growth and increasing importance of the coasting trade of India may be illustrated by a comparison of the statistics for 1878-79 the year after the famine, when trade may be said to have returned to its normal condition with those for 1882-83, the latest year for which full details are available

In 1878-79

In 1878-79, a total of 4080 stermers, of 3 614 349 tons, entered the coast ports with cargoes, while 97,767 sailing vessels, of 2,151,673 tons also entered with cargoes number of vessels with cargoes entered, 101,847, of 5,766,022 tons The number of vessels which cleared with cargoes in the same year was 3981 stermers, of 3,412,546 tons, and 84 507 sailing vessels, of 1,940,196 tons. Total number of vessels cleared with cargoes, 88,578, of 5,352,742 tons Grand total of vessels entered and cleared, 190,425, of 11,118,764 The steam coasting trade is almost entirely monopolized by British or British Indian vessels Of the 8061 steamers which entered or cleared Indian ports coastwise in 1878-79, only 46 were foreign, while not a single one was native, average tonnage of each steamer, 871 tons Of the 182,364 sailing vessels, 177,567 were small native craft, of an average of only a little over 18 tons each, 2792 were foreign vessels, of an average burthen of 62 tons, while 2005 were British or British Indian sailing ships, of an average of 342 tons value of the private coasting trade in 1878-79 was-Imports, merchandise, £21,978,011, and treasure, £3,777,852, total,  $f_{25,755,863}$  Exports, mcrchandisc,  $f_{23,172,328}$ , and treasure, £,2,442,657, total, £25,614,985 Total of private imports and exports, merchandisc, £45,150,339, and treasure, £6,220,509, grand total, £51,370,848 Government im ports in 1878-79 comprised—stores, £436,407, and treasure, £,2,644,480, total, £,3,080,887 The exports comprisedstores, £316,206, and treasure, £1,891,763, total, £2,207,969 Coasting Grand total Government imports and exports, £5,288,556

The figures of the coasting trade for 1882-83 show that In 1882-4780 steamers with cargoes, of 5,040,898 tons, and 83 103,203 sailing vessels, of 2,070,626 tons, entered Indian coast ports, while 4735 steamers, of 4,925,967 tons, and 93,383 sailing vessels, of 1,931,639 tons, cleared during the year Total vessels entered and cleared with cargoes, 9515 steamers, of 9,966,865 tons, 196,587 sailing vessels, of 4,002,265 tons, total vessels of all classes, entered and cleared, 206,101, tonnage, 13,969,130 Of the 9515 coasting steamers which entered or cleared Indian ports in 1882-83, 9439 were British or British Indian, and 76 foreign, with a total of 9,966,865 tons, or an average of 1047 tons each Sailing vessels included-265 British, with an average of 692 tons, Butish Indian, 3060, average 1186 tons, foreign, 2000, average 414 tons, and native craft, 190,271, average 175 tons The total value of the private coasting trade in 1882-83 was - Imports, merchandise, £,25,419,831, and treasure, £,4,066,557, total, £,29,486,388 Exports, merchandise,  $f_{24}$ , 524,241, and treasure,  $f_{3,316,125}$ , total, £27,840,366 I otal value of private imports and exports, merchandise, £49,944 072, and treasure, £7,382,682, grand total, £57,326,754 This total, however, includes £,5,217,328 of re-imports, and  $f_{6,035,678}$  of re-exports, grand total, £,11,253,006 representing re-exports and re-imports of the foreign trade given in the previous section of this chapter The Government imports in 1882-83 comprised — stores, £459,985, and treasure, £1,882,411, total, £2,342 396 The exports comprised - stores, £358,026, and treasure, £,2,497,265, total, £2,855,291 Grand total of Government imports and exports, by coasting vessels, £5,197,687

Comparing the figures for the two years, it will be seen that Com the number of vessels engaged in carrying cargoes coastwise parison of the two increased by 15,676, and the tonnage by 2,850,366 tons, between years 1878-79 and 1882-83 The increase was principally in the steam traffic Of the private trade, imports of merchandise in the same period increased by £3,441,820, and of treasure by £,288,705, total, £3,730,525 Exports of merchandise increased by £1,351,913, and of treasure by £873,468, total, £2,225,381 Including both imports and exports, the value of the merchandise carried coastwise showed an increase of  $f_{4,793,733}$ , and of treasure by  $f_{1,162,173}$ , grand total increase of private merchandise and treasure, £5,955,906

Adding the value of Government imports and exports, the total coast borne trade of India increased from £56,659,404 in 1878-79 to £62,524,441 in 1882-83, or by £5,865,037

Frontier trade

FRONTIER TRADE —Attempts have been made to register the trade which crosses the long land frontier of India on the north, stretching from Baluchistán to Independent Burma turns obtained for a period of five years ending 1882-83 show an annual trans-frontier landward trade averaging about 91 millions sterling, the yearly imports averaging about 5 millions, and the exports about 41 millions sterling. Of this, nearly one half, or 44 per cent, belongs to Burma, and between one fourth and one third, or upwards of 28 per cent, to the Punjab and Sind Details of this import and export transfrontier trade for each of the five years will be found in the tables on subsequent pages The figures, although perhaps not absolutely accurate, may be accepted as substantially correct

Three routes to Afghan 1-tan

Three main trade routes pierce the Suláiman Mountains, main trade across the western frontier of the Punjab and Sind are-(1) the Bolan Pass, which collects the trade both of Kandahar and Khelat, and debouches upon Sind at the important mart of Shikarpur, whose merchants have direct dealings with the remote cites of Central Asia, (2) the Gomal Pass, leading from Ghazni to Dera Ismail Khan, which is followed by the half-military, hali-trading clan of Povindahs, who bring their own caravans of camels into the heart of India, (3) the Khaibar Pass, from Kabul to Peshawar

Value of Afghan trace

The aggregate value of the annual trade with Afghanistán, previous to the late war, was estimated at 1 million sterling each way, or a total of 2 millions, but it has since decreased The figures for 1875-76, which, however, are stated to be incomplete, give the value of the imports from Afghanistán at £914,000, consisting chiefly of raw silk, dried fruits and nuts, mannt or madder and other dyes, charas (an intoxicating preparation of hemp) and other drugs, wood, and furs, the total exports in 1875-76 were valued at £,816,000. chiefly cotton goods both of native and European manufacture. Indian tea, indigo, and salt In 1882-83, the total imports from Afghánistán and the neighbouring hill tribes into Sind and the Punjab amounted to £526 560, and the exports to £863,445, total, £1,390,005

Trade with (cntral Asia.

The Puniab also conducts a considerable business via Kashmir with Ladákh, Yarkand, and Kashgur, estimated at about 1 million sterling altogether. The chief marts on the side of India are Amritsar and Jalandhar, from which latter place the route runs northwards past Kángra and Pálampur to Leh, where a British official has been stationed since 1867, in which year also a fair was established at Palampur to attract the Yarkandí merchants Merchandise is usually conveyed across Himalayan the Himálayan passes on the backs of sheep and yaks, but traffic, British enterprise has successfully taken mules as far as Leh In 1875-76, the total imports from Kashmir were valued at £484,000, chiefly pashmina or shawl-wool, charas, raw silk, gold-dust and silver ingots, and borax, the exports were valued at £342,000, chiefly cotton goods, food-grains, metals, salt, In 1882-83, the imports from Kashmir into tea, and indigo the Punjab amounted to £505,335, and the exports to £,349,477, total, £,854,812 The whole trans-frontier land ward trade of the Punjab in 1882-83 was-imports, £981,167, and exports,  $f_{1,083,920}$ , grand total,  $f_{2,065,087}$ 

Farther east, the Independent State of Nepal cuts off direct with intercourse with Tibet for a total length of nearly 700 miles, Nepal bordering the North-Western Provinces, Oudh, and Behar Little trade is allowed to filter through Nepál, to and from Tibet (amounting in value in 1882-83 to £82,519 for both imports and exports) yet a very large traffic is everywhere carried on along the frontier between the Nepalis and British subjects The Nepál Government levies transit duties impartially on all commodities, but it is asserted that their fiscal tariff is not intended to be protective, and does not in fact operate as such Markets are held at countless villages Frontier along the boundary, for the exchange of rural produce and marts articles of daily consumption, and many cart tracks cross the line from our side, to lose themselves in the Nepal tarar principal trade route is that which starts from Patná, and proceeds nearly due north through Champaran District to the capital of Khatmandu, but even this is not passable throughout for wheeled traffic From Khatmandu, two routes branch Nepal off over the central range of the Himalayas, which both trade ultimately come down into the valley of the Tsanpu, or great river of Tibet

In 1877-78, the registered trade with Nepál (which Nepal is doubtless below the truth) amounted to a total of trade £1,687,000, of which more than two-thirds was conducted by Bengal The imports from Nepál were valued at £1,054,000, the principal items being food grains and oil-seeds, cattle, timber, and horns. Other articles of import which do not figure prominently in the returns are musk, borax, chireta, madder,

Trade with cardamoms, chauris or yak-tails, ginger, balchai or scented Nepal, grass, furs, and hawks The Indian exports to Nepál in 1877-78 were valued at £633,000, chiefly European and native 1877 piece-goods (of cotton, wool, and silk), salt, metals, raw cotton. sugar, and spices To these may be added the miscellaneous articles which may be usually found in a pedlar's pack and 1882 1882-83, the total imports from Nepal into the North-Western Provinces, Oudh, and Bengal amounted to £,1,378,175, and the exports from British India to £855,346, grand total, Bhutan The trade with Sikkim and Bhutan is at £,2,233,521 present too insignificant to require notice, although it is possible that our future entry into Tibet may lie through these States

A certain amount of traffic is conducted with the hill tribes on the north-east frontier, who almost surround the Province tirce, of Assum from Bhutan to Manipur According to the returns for 1877-78, the total frontier trade of Assam amounts to 1877 about f 100,000 a year In 1882-83 it amounted to f,115,206, n l 1SS2 £83,318 being imports and £31,888 exports. It consists chiefly of the bartering of rice, cotton cloth, salt, and metals, for the raw cotton grown by the hill tribes, and for the choutchouc, lac, beesway, and other jungle produce which they collect

> The trade with Independent Burma has a special character, and it has for some years past been subject to a fairly accurate system of registration. The main route is by the Irawadi river, which is navigable by large steamers. I he trade on the Sittang (Tsit taung) is chiefly confined to the import of timber tration is also attempted at six land stations. The total trade in 1877-78 was valued at £3 426,000, almost equally divided between exports and imports. The principal imports from Independent Burma into British Burma were timber (£,213,000), raw cotton (£,163,000), sesamum oil (£,130,000), manufactured silk (£107,000), juggery sugar (£98,000), cattle (£, 88,000) and ponies (£, 20,000), cotton goods woven from European varn (£46,000), earth oil (£65,000), and cutch (£,41,000) Many of these articles are liable to be declared royal monopolies (although these monopolies were abolished in 1882), and consequently the figures fluctuate greatly year by year Other imports of interest, though of smaller value, are pickled tea (£19,000) and jade (£.18.000)

I he exports from British to Independent Burma in 1877, were rice (£,435,000), cotton piece goods (£207,000) and cotton

North east frontier

Trade wih Indepen dent Burma,

1577-78 Laps rt-

Extores 1877 78 twist and yarn (£188,000), manufactured silk (£173,000), Trade with ngá-pi or salted fish (£159,000), raw silk (£84,000), woollen Burma, goods (£43,000), salt (£33,000), etc Many of these goods 1877-78were formerly the subjects of royal monopoly, or they competed with the products of manufactories started by the king at Mandalav Salt is exempted from the ordinary customs duties at Rangoon, and pays only a transit duty of I per cent if declared for Independent Burma.1

Full details of the import and export trade between British Burmese Burma and Independent Burma and the Shan States for 1882-8, 1882-83 are not available. As regards totals, the imports amounted to £2,504,135 in value, and the exports to £1,752,299, total, £4,256,434

The trade between British Burma and Siam was estimated Siam in 1877-78 at the total value of £126,000, being £,69,000 trade for imports from Siam, and £57,000 for exports In 1882-83. the trade between British Burma and Siam amounted toimports from Siam, f, 40 349, and exports, f, 141,958, total, £, 182,307

The following tables exhibit the total trans-frontier land trade of India (1) with the different border countries and tribes, and (2) the extent to which it is participated in by the neighbouring British Provinces -

TRANS-FRONTIER LANDWARD TRADE OF INDIA WITH EXTERNAL S141ES FOR THE FIVE YEARS 1878-79 TO 1882-83

FROM	Landward Imports into India					
	18789	1879 80	1880-81	1881-82	1882 83	
Afghánist in and neighbour- ing tracts and hill tril es Kashmir Ladakh,	£ 755 849 558 537 17 104	£ 611 418 409,744 17 013		£ 487 852 495 949 37 248	£ 520 560 505 335 51 284	
Tibet Vepal Sikkim and Bhutin N E States perond the Ben-	1 7 104 1 7 969 1 235 236 24 738	71 349 1 397 487 61 103	63 393 1 606 929 43 395	64 206 1 389 548 35 339	58 322 1 378 175 33 399	
grl and Assam Frontier Independent Buima and Shan States Saum,	36 402 2 072 441 35 7 <sup>1</sup> 7	47 312 2 222 165 80 047	53 027 2,126 857 41,325	64 949 2 110 346 39 966	81 078 2 504 135 40 349	
Total Imports,	4 899 095	4,917 638	5 103 580	4 725 403	5 178 637	

<sup>1</sup> NB -Since these pages went to the press, Independent Burma has been incorporated into the British Empire The above figures will therefore soon lose their value

# TRANS-FRONTIER LANDWARD TRADE OF INDIA-(co. rtinued)

	Landward Exports from India Ol							
I INTO	18/9 79	1879-80	1880 81	1881-82	1 1882 8:			
Afghanistan and neighbour ing traces and hill tribes Kashmir Ladakh Tibet Tibet Tibet The States beyond the Bengal and Assam Frontier Independent Burma and	-57 545 8 817 14 861 80 361 17 166	1 184 695 282,426 15 729 20 139 859 358 4 576 15 C <sub>5</sub> 7 1 813 666 66 386	18 214	21,508	n/ 863 In 349 32 tern 28c, and total, 1 15 at h 1t 1s Ithrough			
Tot I Export	3 971 59	l 4 292 6	4 682 464	4 374 367	all tribes			
(rkand lotal Inports	8 871 274	9 210 2-0	9 789 044	0 0 مر 769	he returns nounts to			
TRANS FRONTIFR I ANDWARD TRADE OF INDIA 10k 1H £115,206, BORDER PROVINES FOR THE FIVE YEARS 1878-79 IC It consists , and metals, I and ward Important of 1 and for the								
1		1°8c	15⊀o 8¢	d 1841 42	uce which			
Punish NW Provinces and O a Binga A sam B tish Purma	2 103 136	2,1 ,6 820,41 531,595 661,140 50,42 230,-12	55 231	13.0 2.45 5.12 6.13 633 66.4 627 376 70 990 2 130 312	wadi river, he sittang r Regis			
Ford Imp its	8r, yr,	4 517 6 8	5 179 377	172 40	total trade lly divided ports from			
i i	1 70 79	I at 14 to	rtkapont fr 182 bs	on I 2	re timber (130,000), 000), cattle			
S nd Punj di, N W Frystee d O dh Prns d N sam I ritish Burm i  I otal Lyport	215 235 949 963 203 343 628 587 20 272 1 954 159	1 880 052	339 146 629 246 28 401	230 910 1 348 99 280 526 029 224 2 1 314 1 704 396				
GPAND TOTAL INVOKE			98118,9		3 9 249 773			

THE INTERNAL TRADE of India greatly exceeds her foreign Internal commerce, but it is impossible to estimate its amount the one hand, there is the wholesale business, connected with the foreign commerce, in all its stages—the collection of agricultural produce from a hundred thousand villages, its accumulation at a few great central marts, and its despatch to the seaboard The sea-imports and manufactured articles are distributed by the same channels, but in the reverse direction On the other hand, there is the interchange of commodities of native growth and manufacture, sometimes between neighbouring Districts, but also between distant Provinces unimportant exceptions, free trade is the rule throughout the vast peninsula of India, by land as well as by sea Hindus possess a natural genius for commerce, as is shown by the daring with which they have penetrated into the heart of Central Asia, and to the east coast of Africa Among the benefits which British rule has conferred upon them, is the removal of the internal duties and other restraints which native despotism had imposed upon trading energies

Broadly speaking, the greater part of the internal trade Internal remains in the hands of the natives Europeans control the trade in native shipping business, and have a share in the collection of some hands of the more valuable staples of export, such as cotton, jute, oil seeds, and wheat But the work of distribution, and the adaptation of the supply to the demand of the consumer, naturally fall to those who are best acquainted with native Even in the Presidency towns, most of the retail shops are owned by natives

The Vaisya, or trading caste of Manu, has now scarcely Trading a separate existence, but its place is occupied by offshoots castes and well-marked classes On the western coast the Parsis, by the boldness and extent of their operations, tread close upon the heels of the great English houses the interior of the Bombay Presidency, business is mainly divided between two classes, the Baniyas of Gujarát and the Márwárís from Rájputana Each of these profess a peculiar form of religion, the former being Vishnuites of the Vallabháchárva sect, the latter Jains In the Deccan, their place is in taken by Lingayats from the south, who again follow their Southern India, own form of Hinduism, which is a species of Siva-worship Throughout Mysore, and in the north of Madras, Lingayats are also found, but along the eastern seaboard the predominating classes of traders are the castes named Chetties and Komatis Many of these trading castes still claim Vaisya descent

Northern India.

In Bengal, however, many of the upper classes of Súdras have devoted themselves to wholesale trade, although here also the Jain Marwaris from Rajputana and the North-West occupy the front rank Their head quarters are in Murshidábád District, and Jun Márwáns are found throughout the valley of the Brahmaputra, as far up as the unexplored frontier of China They penetrate everywhere among the wild tribes, and it is said that the natives of the Khasi Hills are the only hillmen who do their own business of buying and selling North-Western Provinces and Oudh, the traders are generically called Baniyas, and in the Punjab are found the Khatris (Kshattrivas), who have perhaps the best title of any to regard themselves as descendants of the original Vasyas

Trade (ensus, 1572

and ISSI

According to the general Census of 1872, the total number of persons throughout British India connected with commerce and trade was 3 224 000, or 5 2 per cent of the total adult males In 1881, throughout British and Feudatory India, 3,232 120 adult males were returned as engaged in commerce and trade or 3 87 per cent of the total male population engaged in some specific occupation

THE LOCAL TRADE of India is conducted in the permanent

bazars of the great towns, at weekly markets in the rural

Local trale if Lehr

villages, at annual gatherings held for religious purposes, or by means of travelling brokers and agents. The cultivator himself, who is the chief producer and also the chief customer, knows little of large cities, and expects the dealer to come to his own door Each village has at least one resident trader, who usually combines in his own person the functions of Theyllage money-lender, grain merchant, and cloth-seller system of rural economy is entirely based upon the dealings of this man, whom it is sometimes the fashion to decry as a usurer, but who is often the one thrifty person among an improvident population. If his rate of interest is high, it is only proportionate to the risks of his business. If he sometimes makes a merciless use of his legal position, the fault rests rather with the inflexible rules of our courts, which enable him to push the cultivators to extremes not allowed under Abolish the money-lender, and the general body of cultivators would have nothing to depend upon but the harvest of the single year. The moncy-lender deals chiefly in grain and in specie

In those Districts where the staples of export are largely

m mes lender grown, the cultivators commonly sell their crops to travelling Travelling brokers, who re-sell to larger dealers, and so on until the brokers commodities reach the hands of the agents of the great shipping houses The wholesale trade thus rests ultimately with a comparatively small number of persons, who have agencies, or rather corresponding firms, at the central marts

Buying and selling, in their aspects most characteristic of Religious India, are to be seen not in the large cities, nor even at the fairs weekly markets, but at the fairs which are held periodically at certain spots in most Districts Religion is always the original cause of these gatherings or melás, at some of which nothing is done beyond bathing in the river, or performing pious But in the majority of cases, religion merely ceremonies supplies the opportunity for secular business Crowds of petty traders attend, bringing the medley of articles which can be packed into a pedlar's wallet, and the neighbouring villagers look forward to the occasion, to satisfy alike their curiosity and their household wants.

The improvement in means of communication, by the con Increase of struction of railways and metalled roads, has directly developed internal trade internal no less than foreign trade Facilities for rapid carriage tend to equalize prices not only over large areas of country, but also over long periods of time As wheeled carts supersede pack bullocks, and as railroads supersede carts, the whole of India will gradually become one country for the purposes of food supply It is by this means alone that a guarantee can be provided against the ravages of famine The vicissitudes of a tropical climate will always cause local The chief failures of the harvest, whether by drought or by flood, which against science indeed may learn to foresee, but which no practicable famine schemes of irrigation or embankment can altogether avert But India, as a whole, has never yet been unable in any single year to yield sufficient food for her population The real problem of famine is a problem of distribution

In former times, the inhabitants of one District might be How trade perishing of starvation, while plenty reigned in a District acts in famine but 100 miles distant In 1866, the people of Orissa were decimated, not so much by drought or by inundation, as by the impossibility of transport In 1877, the distress in Madras was alleviated by the importation of nearly one million tons of grain, all of which was carried inland by two lines of rail in twelve months Supplies were drawn, not only from the seaboard of Bengal and Burma, but from the most remote

In the year 1877-78, the Central Provinces exported grain to the amount of more than 300,000 tons, and the Punjab to the amount of 400,000 tons, all of which were conveyed south by rail Trade has never known such a stimulus as was afforded on this occasion, when the carrying power proved barely equal to the strain. If the famine had happened before the opening of the rulway, it would have resulted in a loss of life without parallel even in the annals of India.

Normal action of internal trade

But the utility of local trade is not to be judged of only at In normal seasons, it tends alike to regulate prices and to promote a higher standard of comfort. Within the last twenty-five years, the cultivators have learnt for the first time the real value of their produce. In the old days, little was grown beyond grain crops for the year's food slightest fulure meant local distress, while a bumper harvest so depreciated the value of grain that part of the crops was often left unresped to rot in the fields. In 1780 and 1781, a suspension of revenue had to be granted to the District of Sylhet, because the harvest was so bountiful that it would not pay the cost of carriage to market, and consequently the firmers had no means of obtuning money Lyen so late as 1873 the Cellector of Rangpur reported that 'the yield of rice was considered too good by the rapats, as prices were thereby attoduces kept down' The extended cultivation of staples for export, no c vala such as cotton jute, and oil seeds together with the substitut on of more valuable crops for the inferior grains, is now modifying the entire system of Indian agriculture. I and is not being withdrawn from food crops to any appreciable extent, but the rayat is everywhere learning to cultivate high priced sabsidiary crops which will help to pay his rent

equalizes prices

Statist of directal. tra le

abic crops

It is impossible to express in figures the precise extent of the internal trade of India. But the following statistics will serve in some measure to show both its recent development and its actual amount. They are based upon the registration returns which were collected in certain Provinces changes in the system of registration, it is not safe to institute general comparison between different years. Inter-provincial trade statistics are now chiefly confined to railway returns and the traffic passing through certain registration centres

Central I ray nees

In 1863-64, the external trade of the Central Provinces, both export and import, was estimated to amount to 102,000 tons, valued at £3,909,000 By 1868-69, after the opening of the Jabalpur Railway, it had increased to 209,000 tons, valued at £6,795,000 In 1877-78, the year of the famine in Southern India, the corresponding figures were 635,000 tons, and £9,373,000, showing an increase in 14 years of more than six-fold in quantity, and considerably more than two-fold in value The comparatively small increase in value is partly to be attributed to the exclusion of opium, which merely passes through in transit from Málwá In 1882-83, the total external trade of the Central Provinces, imports and exports, as represented by the railway-borne traffic to stations outside the Chief Commissionership, and the registered trade with adjoining Native States, was returned at over 650,000 tons, valued at £,8,451,047

In 1874-75, the total external trade of the Punjab amounted Punjab to about 600,000 tons, valued (but probably overvalued) at about £16,000,000 By 1877-78 it had increased to nearly 900,000 tons, valued at £17,500,000 In 1882-83, the external trade of the Punjab trans-frontier, railway borne, and boat traffic, was returned at nearly three-quarters of a million tons, of the value of 132 millions These figures show a decrease in 1882-83, as compared with 1877-78 of more than one-sixth both in weight and value. The high figures of 1877-78 are, however, accounted for by the famines in Kashmir and South India, in consequence of which there were abnormally large exports of wheat and other grains from the Puniab in both directions

The total trade of Behar in 1877-78 was valued at Behar £16,000,000 In 1882-83, the registered figures show that the East Indian Railway carried a total merchandise valued at over £19,000,000, to and from the 'Behar block' But perhaps the significance of such enormous totals will become plainer if we take the case of a single mart, Patna, which may claim to be considered one of the most important centres of inland traffic in the world Favourably situated on the Ganges, near the confluence of the Son (Soane) and the Gogra, where the principal trade route branches off to Nepál, it has become a great changing station for the transfer of goods from river to rail

In 1876-77, the imports and exports of Patna city (ex- Trade of cluding the Government monopoly of opium, and probably Patna, omitting a good deal besides) were officially registered to a 1877 value of 74 millions sterling Many articles are included twice over as exported and imported, but the imports alone amounted to more than 4 millions Among the principal

Items on one side or the other may be mentioned—European piece-goods, £1,217,000, indigo, £789,000, oil seeds, £557,000, salt, £389,000, sugar, £274,000, food grains, £258,000, hides, £185,000, saltpetre, £156,000 In 1882-83, the East Indian Railway returns alone show a total import and export trade for Patná (excluding opium) amounting to over  $5\frac{1}{4}$  millions sterling, nearly  $2\frac{1}{2}$  millions being imports and over  $2\frac{3}{4}$  millions exports. As regards the river and road trade of Patná city, no recent statistics are available, as registration has there been abandoned for some years past

Growth of a mart, Dongar gaon

Another example of the growth of local trade is exhibited at Dongargáon, as described in the Report on the Trade and Resources of the Central Provinces - - 1 model of what such a report should be Dongargaon now forms the principal market for grain on the fertile plateau of (hhatisgarh, which is perhaps destined to become a regular source of wheat supply to England Thirty years ago, it was a petty hamlet of about 20 houses, buried in wild jungle, and only distinguished from the neighbouring villages by a weekly basár held on Sunday In 1862, the enterprising agent of a Nagpur firm of native merchants settled here, and began to make purchases of grain. The number of houses has now risen to about 2000, of which the majority are tiled gáon had a resident population in 1881 of 5543 season, the concourse daily present in the basar is estimated at 100 000, with 13,000 carts and 40,000 bullocks and Buyers come from as far west as Bombay, while the grain of all the adjoining Districts is brought here for sale

A vearly fair, Karago a A third example of the varying methods of Indian trade may be found in the annual fair held at Karigola in Purnish. This fair dates from the beginning of the present century although its site has changed from time to time. It lasts for about ten days in the month of February. During that season a little town of shops, constructed of bamboos and mitting, rises on the sandy plain that stretches between the village and the bank of the Ganges. The business is entirely of a retail character, the local staples of grain, jute, and tobacco being conspicuously absent. But every article of necessity or luxury for a native household is to be bought. Cloth of all kinds, from thick English woollens to fine Dacca muslins, iron-mongery and furniture from Monghyr, boots, shawls, silks, and brocades from the cities of the North-West, hand-mills.

curry stones, and lac ornaments from the hills of Chutia Nágpur, knives, yaks' tails, ponies, musk, and other drugs, brought down by the Nepális, miscellaneous ware from England, such as umbrellas, matches, soap, paper, candles, buttons, etc.—all find a ready sale. In 1876, the attendance was estimated at 40,000, and in 1881 at 30,000 persons, and the fees upon shops levied by the landowner realized £150. Such fairs are always protected by a special body of police, and the European official in charge of the District or Sub division is usually present.

#### CHAPTER XX

## ARTS AND MANUFACTURES

Manu factures of India

INDIA may be truly described as an agricultural rather than a manufacturing country, yet it must not be inferred that she is destitute of the arts of civilised life swarming hives of industry to compare with the factory centres of lancashire, nor any large mining population But in all manufactures requiring manual desterity and artistic taste, India may challenge comparison with Europe in the last century, in many of them, with England at the The rival kingdoms into which the country present day was formerly divided gave birth to numerous arts of luxury When the first European traders reached the coast of India in the 16th century they found a civilisation both among 'Moois' and '(sentoos' at least as highly advanced as their own In architecture, in fabrics of cotton and silk, in goldsmith's work and jewellery, the people of India were then unsurpressed

Ai' woil

English comperation

But while the I ast has stood still, as regards innufactures on a great scale, the West has advanced by gigantic scrides without a parallel in the history of human progress. On the one hand, the downfall of the native courts deprived the skilled working of his chief market, while on the other, the English capitalist has enlisted in his service forces of nature against which the village artisans in vain try to compete. The tide of circumstance has compelled the Indian weaver to exchange his loom for the plough, and has crushed many of the minor handiciafts.

The tide iow turne i Some consolation can be found in the establishment, within the past few years, of mills fitted out by English capital with English machinery. A living portion of our own industrial activity has been transplanted to Indian soil. Manchester is growing up in miniature at Bonibay, and Dundee at Calcutta the time may jet come when India shall again clothe her people with her own cotton, she already supplies sacks from her jute for the commerce of the world.

Historically the most interesting, and still the most im-Native portant in the aggregate, of all Indian industries are the industries simple crafts in every rural hamlet The weaver, the potter, The the blacksmith, the brazier, the oil-presser, are members of a village community, as well as inheritors of a family occupation the one hand, they have a secure market for their wares, and on the other, their employers have a guarantee that their trades shall be well learned The stage of civilisation below these village industries is represented by the hill tribes, where the weaving of clothes is done by the women of the family An advanced stage may be found in those villages or towns which possess a little colony of weavers or braziers noted for some speciality. Yet one degree higher is the case of local arts of luxury, such as avory-carving or the making of gold lace

Another form of native industry owes its origin to European interference Many a village in Bengal and on the Coromandel Fortified coast still shows traces of the time when the East Indian Com-weaving settle pany and its European rivals gathered large settlements of ments weavers round their little forts, and thus formed the only industrial towns that ever existed in India But when the Company gave up its private trade in 1813 and 1834, such centres of industry rapidly declined, and the once celebrated muslins of India have been driven out of the market by Manchester goods

Cotton weaving is a very ancient industry of India. England it dates back only a couple of centuries Wool and weaving in India, linen were Figland's historical staples, but in India cottonweiving was practised before the time of the Mahabharata The Greek name for cotton fibrics, sindon is etymologically the same as that of India, or Sind while in later days, Calicut on the Malabar coast has given us 'calico' Cotton cloth has always been the single material of Indian clothing for both men and women, except in Assam and Burma, where silk is preferred, perhaps as a survival of an extinct trade with China The author of the Periplus, our earliest authority on the trade an indi of India, enumerates a great variety of cotton fabrics among industry her exports Marco Polo, the first Christian traveller, dilates on the 'cotton and buckram' of Cambay When European adventurers found out the way to India, cotton and silk always formed part of the rich cargoes they brought home

The Figlish appear to have been specially careful to fix their earliest settlements amid weaving populations—at Surat, at Calcut, at Masulpatam, at Hugli In delicacy of texture. in purity and fastness of colour, in grace of design, Indian

Causes of cottons may still hold their own against the world its decline the matter of cheapness, they have been unable to face the competition of Manchester Many circumstances conspired to injure the Indian industry. In the last century, England excluded Indian cotton fabrics, not by fiscal duties, but by absolute prohibition A change of fashion in the West Indies on the abolition of slavery, took away the best Then came cheapness of production customer left to India in Lancashire due to improvements in machinery Lastly, the high price of raw cotton during the American War, however beneficial to the cultivators, fairly broke down the local weaving trade in the cotton growing tracts. Above all, the necessity under which England lies to export something to India to pay for her multifarious imports, has permanently given an artificial character of inflation to this branch of business

Still a domestic udustry

Despite all these considerations, hand loom weaving still holds its own with varying success in different parts of the Regarded as a trade, it has become unremunerative Little is made for export, and the finer fabrics generally are dying out. The far-famed muslins of Dacca and of Arni are now wellnigh lost specialities But as a village industry, weaving is still carried on everywhere, though it cannot be said to flourish If Manchester piece-goods are cheaper, native piece goods are universally recognised as more durable. Comparative statistics three fifth are not available, but it may be roughly estimated that about three-fifths of the cotton cloth used is woven in the country from native thread or from imported twist

>upplies consumpt

Cottonweaving in Madras, 1870.

In 1870, the Madras Board of Revenue published a valuable report on hand loom weaving, from which the following figures are taken. The total number of looms at work in that Presidency, with its then population of 31 millions, was returned at 279,220, of which 220,015 were in villages and 59,205 in towns, showing a considerable increase upon the corresponding number in 1861, when the mohartarfa, or assessed tax upon looms, was abolished. The total estimated consumption of twist in 1870 was 31,422,712 lbs, being at the rate of 112 lbs. per loom Of this amount, about one third was imported twist, and the remainder country made total value of the cotton goods woven was returned in 1870 at 31 millions sterling, or £12, 10s. per loom, but this was believed to be much under the truth

The export of country-made cotton cloth from Madras in the same year, 1870, was about £220,000 By 1882-83, the export of country made cloth from Midris hid dwindled to \$45,196

In the Central Provinces, where hand-loom weaving still in Central flourishes, and where the statistics are more trustworthy than Provinces, 1878, in some other parts of India, the number of looms in 1877-78 was returned at 87,588, employing 145,896 weavers, with an annual out-turn valued at £828,000 In 1882-83, there were in the Central Provinces three large cotton mills at work, besides 143,801 looms, giving employment to 164,273 workmen, with an out-turn valued at £,858,219 In 1878-79, the export of Indian piece goods from the Central Provinces was valued at £162,642 In 1882-83, it was valued at £147,773

As regards Bengal, hand loom weaving is generally on the in Bengal. The average consumption of piece-goods throughout the Province is estimated at about 5s per head, and the returns of registered trade show that European piece goods are distributed from Calcutta at the rate of about 2s 5d per head In Midnapur, Nadiyá, and Bardwan, the native weavers still hold their own, as appears from the large imports of European twist, but in the eastern Districts, which have to balance their large exports of jute, rice, and oil seeds, the imports of European cloth rise to 2s 7d per head

No part of India has more cruelly felt the English com- in Bom petition than Bombay But in Bombay, the introduction of bay steam machinery is already beginning to restore the work to native hands Twist from the Bombay mills is now generally used by the hand-loom weavers of the Presidency, and is largely exported to China But it is in the finer fabrics produced for export that the Bombay Districts have suffered Taking Surat alone, the export by sea of piece goods at the beginning of the century was valued at £360,000 a year By 1845, the value had dropped to £67,000, rising again to £134,000 in 1859, but in 1874, it was only £6332

It is impossible to enumerate the many special fabrics which Special First Indian fabrics are still produced in various parts of the country among these are the far-famed muslins of Dacca, which can Dacca still be obtained to order, although the quality is far inferior muslins to what it was when Dacca was the capital of a luxurious Muhammadan court Most of the weavers are Hindus, and the high development which their industry has reached may be judged from the fact that they employ no fewer than 126 distinct implements The finest muslins are woven plain, but patterns of coloured silk are afterwards embroidered on them by a separate class of workmen (For the decay of the Dacca manufactures, and the transfer of the weaving communities to agricultural employments, see article Dacca in The Imperial

Gazetteer of India) Fine muslin is woven in small quantities at Sarail in the adjoining District of Lipperah, and Santipur, in Nadiva, still retains its reputation for delicate fabrics with these exceptions cotton-weaving in Bengal produces only coarse articles for common use

In Madras the fine fabrics maintain their ground better,

Madras muslins

crochs

Bombay

fa or c-

although the trade is nowhere flourishing Among those describing mention are the muslins of Arni, the cloth woven by the Nairs on the Malabar coast, the chintzes of Masulipatam, the par jam or '120-thread' cloth of Vizigapatam, and the blue Bangalore salampurs of Nellore At Bangalore, the descendants of the old court we were still manufacture a peculiar kind of cloth, printed in red and black with invthological designs Bombay Presidency, Ahmadabad Surat, and Broach are the chief centres of the manufacture of printed sáris, for which Gujarat is colebrated while Poona Yeola, Nasik and Dharwar produce the fabres dved in the thread which are much worn by the Maiatha races. Silk is often combined with cotton on the looms, and the more expensive niticles are finished off with a border of silk or so'd lace (hand) and Hoshangabad are

the largest weaving towns in the Central Provinces

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Six verving is also a common industry everwhere silk faur is or at least an admixture of silk with cotton, being universally affected as a mark of wealth Throughout Britisl Burma and also in Assam salk is the common material of closning user to we ven by the women of the household Barma, the bulk of the silk is imported from China generally in a raw state but in Assam it is obtained from two or three varietes of worns, which are generally ted or jungle trees, and may be regarded as semi-domesticated. Beneal is the only part of India where seneulture or the reging of the silkworm proper on mulberry can be said to found. The greater part of the silk is wound in I propern file are and exported in the ran state to Lurope. The native supply is either locally consumed, or sent up the Ganges to the great cities of the North-A considerable quantity of raw silk, especially for Bombay consumption, is imported from China from the cocoons of semi-domesticited worms, does not contribute much to the supply (Vide ante, pp 511-514)

Classes of suck fabrica

As compared with cotton-weaving, the silk fibries form a town rather than a village inclustry. Silk fabrics are of two kinds—(1) those composed of pure silk, and (2) those with a cotton warp crossed by a woof of silk. Both kinds are often embroidered with gold and silver. The mixed fibrics are

known as mashru or suft, the latter word meaning 'permitted,' because the strict ceremonial law will not allow Muhammadans to wear clothing of pure silk They are extensively woven in the Punjab and Sind, at Agra, at Haidarabad in the Deccan, and at Tanjore and Trichinopoli in Madras Pure silk fabrics are either of simple texture, or highly ornamented in the form of kinkhabs or brocades The latter are a speciality of Benares, Brocades Murshidabad, Ahmadabád, and Trichinopoli Their gorgeous hues and texture may be inferred from the following names — Shikargah, 'hunting ground,' chand-tara, 'moon and stars,' maschar, 'ripples of silver,' murgala, 'peacock's neck' Printed silks are woven at Surat for the wear of Pársí and Guiarathi women

Oute recently, mills with steam machinery have been estab- Steamsilk lished at Bombay, which weave silk tabrics for the Burmese factories market, chiefly lung 11s, tamains, and patsoes The silk manufactures exported from India consist almost entirely of the handkerchiefs known as bandannas and corahs, with a small proportion of tasar fabrics The trade, after a temporary period of depression, appears now to be increasing 1875-76, 51lk manufactures to the extent of 2,468,052 yards, valued at £238 000, were exported from India In 1877-78, the export of manufactured silk had decreased to 1,481,256 yards, valued at £147 000 By 1878-79, the value of the trade had risen to £195,897, by 1880-81, to £250,256, and by 1882-83, to £,306,928

Lmbroidery has already been referred to in the two pre Embioi ceding paragraphs The groundwork may be either silk, dery cotton, wool, or leather The ornament is woven in the loom, or sewn on afterwards with the needle The well-known choga, which has recently come into popular use in England for dressing gowns, is made of patu or camels hair, embroidered Camel's in Kashmir, the Punjab, and Sind The still better known hair and more viluable Kashmír shawl, made either in Kashmír Kashmir uself or at Ludhiana, and a few other towns of the Punjab, is shawls composed of pasl mina, or the soft wool of the so-called shawlgoat, which is a native of the Himalayan plateaux is embroidered with silk and gold thread at Dacca, Patna, and Delhi Sind and Cutch (Kachchh) have special embroideries of coloured silk and gold Leather work is embroidered in Gujarát Leather ((suzerat) In some of the historical capitals of the Deccan, such work as Gulburgali and Aurangibid, velvet (makhmal) is gorgeously Velvet embroidered with gold, to make canopies, umbrellas, and housings for elephants and horses, for use on State occasions

Not only the goldsmith, but also the jeweller lends his aid A jewelled to Indian embroidery A chadar, or shawl made by order of a shawl late Gáekwar of Baroda, is thus described by Sir G Birdwood 'It was composed entirely of inwrought pearls and precious stones, disposed in an arabesque fashion, and is said to have cost a kror of rupees (say 1 million sterling) Although the richest stones were worked in it, the effect was most har-When spread out in the sun, it seemed suffused with an iridescent bloom, as grateful to the eye as were the exquisite forms of its arabesques'

Carpets and rugs.

Carpets and rugs may be classified into those made of cotton and those made of wool The former, called satrangs of cotton, and daris, are made chiefly in Bengal and Northern India, and appear to be an indigenous industry. They are usually white, striped with blue, red, or chocolate, and sometimes ornamented with squares and diamonds. The woollen or pile carpets, known as kalin and kalicha, are those which have recently attained so much popularity in England, by reason of the low price at which the out-turn of the jail manufactories can be placed on the market

The pile carpet is indigenous to Persia and Túrkistan,

The art came into India with

where the best are still made

of wool.

mann facture.

the Muhammadans 'The foundation for the carpet is a warp of strong cotton or hempen threads, and the peculiarity Process of of the process consists in deverously twisting short lengths of coloured wool into each of the threads of the warp, so that the two ends of the twist of wool stick out in front The projecting ends are then clipped to a uniform level, and the lines of work are compacted together by striking them with a blunt instrument' (Birdwood) The historical Indian seats of the industry are Kashmir, the Punjab, and Sind, Agra, Mirzapur, Jabalpur, Warangal in the Decean, Walabar and Wasulipatam Velvet carpets are also made at Benares and Murshidabád, and silk pile carpets at Tanjore

Sexts of carpet wearing

Warangal rugs

and Salem

At the London Exhibition of 1851, the finest Indian rugs came from Warangal, the ancient capital of the Andhra dynasty. about 80 miles east of Hardarabad Their characteristic feature was the exceedingly numerous count of the stitches. about 12,000 to the square foot. They were also perfectly harmonious in colour, and the only examples in which silk was used with an entirely satisfactory effect' (Birdwood) price was not less than £ 10 per square yard. The common rugs, produced in enormous quantities from the inils at Lahore, Jabalpur, Mírzapur, Benares, and Bangalore, sell in England at 7s 6d each

Gold and silver, and jewels, both from their colour and their Gold intrinsic value, have always been the favourite material of smiths' work and Oriental ornament. Even the hill tribes of Central India and jewellery the Himalayas show skill in hammering silver into brooches, armlets, and necklets. Imitation of knotted grass and of Hill work leaves seems to be the origin of the simplest and most common form of gold ornament, the early specimens consisting of thick gold wire twisted into bracelets, etc. A second archaic type of decoration is to be found in the chopped gold jewellery of Gujarát (Guzerát). This is made of gold lumps, either solid or hollow, in the form of cubes and octahedrons, Cube strung together on red silk. Of artistic jeweller's work, the jewellery best known examples are those from Trichinopoli, Cuttack, and Kashmir

Throughout Southern India, the favourite design is that known as swámi, in which the ornamentation consists of figures of Hindu gods in high relief, either beaten out from the surface or fixed on to it by solder or screws The Trichinopoli Trichino work proper, which has been to some extent corrupted to suit poh Figlish taste, includes also chains of rose gold, and bracelets of the flexible scrpent pattern. The silver filigree work of Cuttack, identical in character with that of ancient Greece Cuttack and of Malta at the present day, is generally done by boys, whose sensitive fingers and keen sight enable them to put the fine silver threads together with the necessary rapidity and The goldsmith's work of Kashmir is of the kind Kashmir known as 'parcel gilt,' and is further distinguished by the ruddy colour of the gold used 'Its airy shapes and exquisite tracery, graven through the gilding to the dead white silver below, softening the lustre of the gold to a pearly radiance, give a most charming effect to this refined and graceful work' (Birdwood) The hammered repowse silver work of Cutch Cutch (Kachchh), although now entirely naturalized, is said to be of Dutch origin Similar work is done at Lucknow and Dacca.

The goldsmith's art contributes largely to embroidery, as has already been mentioned. Gold and silver thread is made by being drawn out under the application of heat. The operation is performed with such incety, that i rupee's worth of silver will make a thread nearly 800 yards long. Before being used in the loom, this metallic thread is generally twisted with silk from the manufacture of cloth of gold (sonars) or cloth of silver (ruples), the wire is beaten flat, so as to form the warp to a

woof of thin silk or cotton A third kind of metallic ornamentation is practised at Jaipur in Rajputana and Haidarabad in the Deccan, by printing muslins with patterns of gold and silver leaf

Precious stones

Precious stones are lavishly used by Indian jewellers, who care less for their purity and commercial value than for the general effect produced by a blaze of splendour nothing can exceed the skill, artistic feeling, and effectiveness with which gems are used in India both in jewellery proper and in the lewelled decoration of arms and lade' (Birdwood) The general character may be learned from the following description of a hair-comb in the Prince of Wales' collection, made at Jaipur 'The setting is of emerald and ruby Jaipur enamel on gold, surmounted by a curved row of large pearls, all on a level, each tipped with a green glass bead. Below is a row of small brilliants, set among the elegantly designed green and red enamelled gold leaves which support the pearls row of small pearls, with an enamelled scroll-work set with brilliants between it and a third row of pearls, below which comes a continuous row of minute brilliants forming the lower edge of the comb, just above the gold prongs?

Indian non work

The chief duty of the village smith is of course, to make the agricultural implements for his fellow villagers many towns in India, chiefly the sites of former capitals, ironwork still attains a high degree of artistic excellence manufacture of arms, whether for offence or defence, must always be an honourable industry, and in India it attained a high pitch of excellence, which is not yet forgotten magnetic iron-ore, found commonly in the form of sand, yields a charcoal steel which is not surpassed by any in the The blade of the Indian talway or sword is sometimes world marvellously watered, and engraved with date and name. sometimes sculptured in half relief with hunting scenes, sometimes shaped along the edge with teeth or notches like a saw Matchlocks and other fire-arms are made at several towns in the Punjab and Sind, at Monghyr in Bengal, and at Vizianágaram in Madras

Cut'ery

Chain armour, fine as lacework, and said to be of Persian derivation, is still manufactured in Kashmir, Rájputána, and Cutch (Kachchh) Alimadnagar in Bombay is famous for its spear heads. Both fire-arms and swords are often damascened in gold, and covered with precious stones. In fact, the characteristic of Indian arms, as opposed to those of other Oriental countries, is the elaborate goldwork hammered or cut upon

Chain

them, and the unsparing use of gems Damascening on iron Damaand steel, known as kuft, is chiefly practised in Kashmir, and scened at Gujrát and Siálkot in the Punjab The process consists of encrusting gold upon the surface of the harder metal Damascening in silver, which is chiefly done upon bronze, is known as bidari work, from the ruined capital of Bidar in the Nizám's Dominions, where it is still chiefly carried on

The village brazier, like the village smith, manufactures the Brass and necessary vessels for domestic use Chief among these vessels copper is the lotá, or globular bowl, universally used in ceremonial The form of the lota, and even the style of orna- The lota mentation, has been handed down unaltered from the earliest times A lota now in the India Museum, which was disinterred from a Buddhist cell in Kulu, and must be at least fifteen centuries old, represents Prince Siddhartha going on a high Benares enjoys the first reputation in northern Benares procession India for work in brass and copper, producing not only ware vessels for domestic and ceremonial use, but also images and religious emblems In the south, Madura and Tanjore have a similar fame, and in the west, Ahmadabád, Poona, and Násik At Bombay itself, large quantities of imported copper are wrought up by native braziers

The temple bells of India are well known for the depth and purity of their note. In many localities the braziers have a speciality, either for a peculiar alloy or for a particular process of ornamentation Silver is sometimes mixed with the brass, and in rarer cases gold Bidari work, or the damascening of Bidari silver upon bronze, has already been alluded to In this case, ware the metal ground is said to be an amalgain of copper, lead, and tin, made black by dipping in a solution of sal ammoniac, saltpetie, salt, and blue vitriol At Moradabad, in the North-Western Provinces, and at Bhilwara in Udaipur State, Rájputana, tin is soldered upon the brass, and incised through in floriated patterns, which are marked by filling in the ground with a black composition of lic At Purniah in Bengil, a variety of bidars ware is made of zinc and copper, damascened with silver, the processes of which are described at length in Hunter's Statistical Account of Bengal 1 The brass or rather bell-metal ware of Murshid bad, known as khágraí, has more than a local reputation, owing to the large admixture of silver

The demand for enormous quantities of brass work at the Detenoralowest price for the London market, is rapidly deteriorating than of both the designs and the workmanship of the Benares articles work The native braziers are almost compelled to degrade their industry, when they find that the most vulgar patterns, deeply but hastily carved, command a ready sale, while their old faithful work can scarcely find an English customer, at the price necessary for production

Indian pottery

Next to the loom of the weaver, the potter's wheel is the characteristic emblem of an ancient civilisation immemorial, the potter has formed an essential member of the Hindu village community Pottery is made in almost every village, from the small vessels required in cooking to the large jars for storing grain, and the earthenware floats used to ferry persons across a swollen stream But although the industry is universal, it has in few Provinces risen to the dignity of a fine art Perfection has been reached neither in the substance, as in the porcelain of China, nor in the ornamentation, as in ancient Greece The clay in many places works up well, but the product remains mere earthenware, and rarely receives a high finish

Its imper fection-

Sin potters

In Sind and the Southern Punjab the potter's craft has risen to a high art, and here the industry is said to have been introduced by the Muhammadans Sind pottery is of two kinds, encaustic tiles and vessels for domestic use both classes the colours are the same—turquoise blue, copper green, dark purple or golden brown, under an exquisitely transparent glaze The usual ornament is a conventional flower pattern sometimes pricked in from paper, but often painted with much freedom and grace. The tiles, evidently of the same origin as those of Persia and Lurkey, are chiefly found in the ruined mosques and tombs of the old Musalmán dynasties, but the Sind industry still survives at the little towns of Saidpur and Bubri, and at Haidarabad, Karáchi, Tatta, and Hala

and

Tiles

Glazed tiles and pottery are also manufactured at Lahore Punjal and Múltan in the Punjab Efforts have been made by the Bombay poltery

Bombay School of Art to foster this indigenous industry, but, as in other cases of European patronage, the Indian artisan loses his originality when set to copying alien models Something, however, has been done in the right direction by reproducing the old designs from the cave temples of Ajanta and Karlí, in the pottery made at the Bombay School of Art I he Madura pottery also deserves mention, from the clegance of its form and the richness of its colour

Sculpture

The earliest Indian sculptures are found in the monasteries. topes, and 'rails' of ancient Buddhism The best specimens

disclose the still fresh impulse derived from Greek or Roman artists-that impulse which has been historically treated in previous chapters, pp 112 and 170-172 With the revival of Bráhmanism, Indian sculpture degenerated Modern Hındu statuary possesses a religious rather than an æsthetic interest 1 But exquisite flat carving, and perforated arabesque windows or screens in hard sandstone and marble, are still produced at Agra and Jaipur

In the cities of Gujarát (Guzerát), and in other parts of Wood India where the houses are built of wood, their fronts are carving ornamented with elaborate carving. The favourite materials are black-wood (Dalbergia latifolia), sandal-wood, and jackwood The supply of sandal-wood comes from the forests of the Western Ghats in Kánara and Mysore, but some of the finest carving in it is done at Surat and Ahmadábád of 17th century Indian carving indicate that the art received a powerful impulse from the Dutch along the Bombay coast But Indian wood carving is an art of very great antiquity The early stone architecture of the Buddhists is evidently based, both in regard to structure and ornaments, on pre Some of the patterns of modern existing wooden forms Indian wood carving are preserved from that earlier period in exquisite open carving in marble, or open lattice-work windows in hard stone. The more durable material has survived, and now tells its tale The Burmese are also celebrated for their luxuriant wood carving

Akin to wood carving, is the inlaying of the articles known Inlaying as 'Bombay boxes' This art is known to be of modern date, having been introduced from Shiraz in Persia towards the close of the last century It consists of binding together in geometrical patterns, strips of tin-wire, sandal wood, ebony, ivory, Ivory and stag's horn At Vizagapatam in Madras, similar articles carving are made of wory and stag's horn, with scroll-work edged in to suit European taste At Mainpuri, in the North-Western Provinces, wooden boxes are inlaid with brass wire chief seats of ivory carving are Amritsar, Benares, Murshidabad, and Travancore, where any article can be obtained to order in ivory, from a full-sized palanquin to a lady's Human figures in clay, dressed to the life, are prin-Clay cipally made at Krishnagar in Bengul, at Lucknow, and at figures

VOL VI

I For Indian architecture, painting, and musical instruments, see ante. chan w

Luropean industries The preparation of tea, coffee, and indigo have been already described in connection with agriculture. It remains to give some account of those manufactures proper, conducted by steam machinery, and under European supervision, which have rapidly sprung up in certain parts of India during the past few years. These comprise cotton, jute, silk, and wool, and beer, paper, leather, etc.

Cotton mills, 1854-79

Their dis

throughout

India

The first mill for the manufacture of cotton yarn and cloth by machinery worked by steam, was opened at Bombay in 1854 The enterprise has since expanded to vast dimensions In 1879, the total number of mills throughout India was 58. with about a million and a half spindles, and twelve thousand looms, giving employment to upwards of 40,000 persons -men, women, and children Of this total, 30 mills, or more than half, were in the island of Bombay, which now possesses a busy manufacturing quarter with tall chimneystalks, recalling the aspect of a Luncashire town, 14 were in the cotton-growing Districts of Guiarat (Guzerát), also in the Bombay Presidency, 6 were in Calcutta and its neighbourhood, 3 at Madras, 2 at Cawnpur in the North-Western Provinces, 1 at Nágpur in the Central Provinces, 1 at Indore, the capital of Holkar's Dominions, and 1 at Haidarabád, the residence of the Nizam

Cotton mills,1884 Govern ment returns By 1884, the number of steam cotton mills for which returns had been received by Government had increased to 74, with 1,895,284 spindles, and 16,251 looms, giving employment to a total of 61,836 men, women, and children. Of these, 35 were in the town and island of Bombay, 21 were in other Districts of the Bombay Presidency, chiefly Gujaiat, 6 in Bengal, in the suburbs or vicinity of Calcutta, 5 in Madras, namely, 4 in Madras town, and 1 in Bellary District, 3 at Cawnpur in the North-Western Provinces, 2 in the Central Provinces, namely, at Nagpur and at Hinghanghat, and 1 each at Indore and Haidarábád in the Decean

Cotton mills, 1884 private returns

Private returns of the cotton industry show a somewhat different result to that quoted above. A carefully-compiled statement gives the figures up to the 30th June 1884 as follows—On that date there were, in the town and island of Bombay itself, 43 cotton mills, namely, 38 in work, and 5 in course of construction, with a total paid up capital of £4580,430, the number of spindles was 1,251,726, and of looms (in 22 mills), 11,985, giving employment to a daily average of 36,071 men, women, and children, quantity of

cotton consumed (in 36 mills) in twelve months, 1,218,490 Elsewhere in the Bombay Presidency there were 18 mills, with a total paid-up capital for 17 mills of £,943,706 The number of spindles was 289,153, and of looms, in the only 12 mills which had them, 2314 Number of hands employed, 9293, quantity of cotton consumed, 235,935 cwts There were thus, in June 1884, in the Bombay Presidency, 61 mills, either in active operation or in course of construction, with a total paid-up capital of £5,452,136, employing 45,364 hands, and consuming 1,454,475 cwts of cotton In the other Provinces of India there were 20 mills, namely, 6 in Bengal, 3 in the North-Western Provinces, I in the Central Provinces, I at Haidarabád, and 9 in Madras, of which 4 were under construction The total paid-up capital of these mills in Tune 1884 outside the Bombay Presidency was £1,414,950, number of spindles, 79,176, and of looms, 1426, number of hands employed duly, 17 472, quantity of cotton consumed during the year, 371,591 cwts Throughout India there were thus 81 mills in June 1884, constructed at a cost of £,6 867,086, with 1,520,055 spindles, and 15,725 looms, consuming 1,826,016 cwts of cotton during the previous twelve months, and affording employment to a daily average of 62,836 men, women, and children

The general character of the cotton industry and its progress Nagpur may be inferred from the following returns supplied by the Cotton Mill 1882 Fmpress Spinning and Weaving Mills Company at Nagpur, which in 1882 had 30,000 spindles and 450 looms at work, and employed a daily average of 3137 hands sumption of raw cotton up to 1880 averaged 1,707,000 lbs a year, their out turn has averaged 1,040,000 lbs of yarn valued at £45,358, and 627,700 lbs of cloth valued at  $f_{30,661}$  In 1882, the consumption of raw cotton at these mills was 3,796,240 lbs, with an out-turn of 1,804,530 lbs of twist, and 1,494,945 lbs of manufactured cloth, of a total value of £ 159,386

This rapid and widespread development sufficiently proves Sound that the new industry though still in its infancy, is being basis of the manucarried on under wholesome conditions, and meets a real facture demand Checks have from time to time occurred at Bombay, caused partly by competition with European goods recklessly thrown upon the market regardless of profit, and partly by that mismanagement to which joint-stock enterprise is peculiarly exposed But with the revival of general commerce, the

Bombay mills have always again started upon a career of renewed activity

Cheap material

Cheap Iabour

No adul teration Their advantages over the English manufacturer are manifest. The crop of raw material and the market for the manufactured article are both at their very doors, thus saving a double freight Labour is cheap, abundant, docile, and not liable to strike. A certain amount of prejudice exists in favour of their products, partly because of their freedom from adulteration, and partly from the patriotic pride naturally felt for a native industry Lastly, up to March 1882, they had the slight protection of a moderate customs duty of 5 per cent ad valorem (imposed for fiscal purposes solely) upon imported goods. The cotton import duties were finally abolished, together with the general import duties upon all but a few excepted articles of merchandise, such as arms and ammunition, liquors, etc., by the Indian Tariff Act, xi of 1882

On the other hand, they labour under not a few countervailing

disadvantages The cost of erection, including spindles and

The draw hacks Cost of erection

fitting up, was said (1877) to be about three times as much in India as in England Thus a mill containing 50,000 spindles, which in Lancashire might be set up for about £1 per spindle, or a total of £50,000, would cost at Bombay about £150,000 On this cap tal the initial charge for interest would be only £2500 a year in England, calculated at 5 per cent, as compared with £13,500 in India, at the rate of 9 per cent Again, the cost of fuel, and all stores which require to be imported from England, tells greatly against the Bombay mills Another important consideration which it is difficult to estimate in all its bearings is the quality of Indian cotton, known as 'short stapled,' which does not admit of being spun into the finer kinds of yarn Consequently the Indian mills can only turn out the lower 'counts' of yarn, and the coarser fabrics of

IIIgh interest

Short staple

Only coarse qualities made without competition

Adopting the technical language of the trade, the great bulk of the yarn spun in Indian inills consists of numbers 6, 10, and 20 mule twist. Water twist is spun in smaller quantities, generally of number 16. The maximum of either kind is number 30. The mills are capable of spinning up to 40, but as a matter of fact, they never attempt this number, owing partly to the inferior quality of the cotton, and partly to the carelessness of the work-people. As regards piecegoods, the kinds principally woven in the mills are those known as T cloths, domestics, sheetings, drills, and jeans,

piece-goods, leaving English imports of the higher classes

made entirely from the yarn spun in the same mills Longcloths, chadars and dhutis, are also manufactured, and recently attempts have been made to turn out drawers, stockings, nightcaps, and towelling But Manchester still possesses a practical monopoly both of the higher 'counts' of yarn which are used by the hand-loom weavers, and of the superior qualities of cloth

The Indian mills are almost without exception the property Joint stock of joint-stock companies, the shares in which are largely taken cotton up by natives The overlookers are skilled artisans brought from England, but natives are beginning to qualify themselves for the post The operatives are all paid by the piece, and, as compared with other Indian industries, the rates of wages are high In 1877, at Bombay, boys earned from 14s Bombay to £1 a month, women, from 16s to £1, and 10bbers, from wages £3 to £6, ros Several members of one family often work together, earning between them as much as f, to a month The hours of work are from six in the morning to six at night, with an hour allowed in the middle of the day for meals and smoking The Indian Factories Act, xi of 1881, regulates the hours of work for children and young persons, and enforces the fencing of dangerous machinery, etc

Besides supplying the local demand, these mills are gradually Statistics beginning to find a market in foreign countries, especially for of Bombiy their twist and yarn. Between 1872-73 and 1882-83, the manu export of twist from Bombay increased from 1,802,863 lbs factures valued at  $\pm .97,162$  in 1872-73, to 21,271,059 lbs valued at £883,665 in 1878-79, and to 42,598,400 lbs valued at  $f_{1,705,978}$  in 1882-83, or an increase of twenty-four-fold in quantity and nearly eighteen-fold in value in eleven years Within the same period, the export of grey piece-goods from Bombay increased from 4,780,834 yards valued at £,75,495 in 1872-73, to 14,993,336 yards valued at f, 198,380 in 1878-79, and to 30,730,396 yards valued at  $f_{357,320}$  in 1882-83 The total foreign exports of Indian twist and varn, and of Indian manufactured grey, white, and coloured piece-goods from all Indiar ports amounted to £2,578,382 in value in 1882-83

The above figures refer to Indian produce and manufactures only, and are exclusive of  $1\frac{1}{3}$  million sterling of re-exported British cotton manufactures Including these re-exports, the total exports of cotton twist, yarn, and manufactures amounted to just under 4 millions in 1882-83 from all Indian ports.

The twist and yarn is mostly sent to China and Japan, the China and piece-goods to the coast of Arabia and Africa

The figures for the coasting trade show a slower growth, the total value of twist carried from port to port in 1878-79 having been £804,996, and of piece-goods (including handloom goods), £654,553 In 1882-83, cotton twist and yarn to the value of £896,369, and piece goods to the value of £633,316, were exported in the coasting trade, apart from exports to foreign countries

Future of the trade Mr O Conor, who has devoted much attention to the matter, thus summarizes his opinion regarding the future of the Indian cotton mills in his Review of Indian Trade for 1877-78—'Whether we can hope to secure an export trade or not, it is certain that there is a sufficient outlet in India itself for the manufactures of twice fifty mills, and if the industry is only judiciously managed the manufactures of our mills must inevitably, in course of time, supersede Manchester goods of the coarser kinds in the Indian market' The correctness of this opinion is further shown by Mr O Conor's Review of Indian Trade for 1884-85, in which he states—'The importation of the coarser kinds of twist has long been unimportant, the yarn of the Indian mills having driven it out of the market Even the medium kinds are now diminishing, an indication that the Indian mills are beginning to make them too'

Wool

Besides cotton mills, wool-weaving by steam machinery has recently been established in India, the principal mills being the Egerton Mills in Gurdaspur District, Punjab, and the Cawnpur woollen mills in the North-Western Provinces

Jute mills

The jute mills of Bengal have sprung up in rivalry to Dundee, as Bombay competes with Manchester, but in Bengal the capital for jute-manufacturing is almost entirely supplied by Europeans The jute-mills cluster round Calcutta, and on the opposite side of the river in Howrah District. The industry has also taken root at Sirájganj, far away up the Brahmaputra, in the middle of the jute-producing country.

Number in 1882 83

In 1882-83, the total number of jute mills in India was 21, of which 19 were in Bengal, 1 at Kolába on Bombay island, and 1 at Chittivalasa in Vizagaputam District, Madras The weaving of jute into gunny cloth is an indigenous handloom industry in Northern Bengal, chiefly in the Districts of Purniah and Dinájpur. The gunny is made by the semi-aboriginal tribe of Koch, Rajbansi or Pali, both for clothing and for bags, and, as with other industries practised by non-Hindu races, the weavers are the women of the family, and not a distinct caste. The mills turn out bags, and

also cloth in pieces to a limited extent. The bags vary in Jute size, according to the markets for which they are intended. Vaneties The largest are the twilled wool packs sent to Australia, of gunny which measure 56 inches by  $26\frac{1}{2}$ , and weigh about  $10\frac{1}{2}$  bags The smallest are the Hessian wheat bags for California, measuring 36 inches by 22, and weighing only The average weight may be taken to be from 2 to 21 lbs

The mills in Calcutta and its neighbourhood were estimated Out turn of in 1878 to keep about 4000 looms at work, the total amount of pute mills, raw jute worked up annually was about 13 million cwts, which 1878, yielded about 90 million bags. The 21 steam jute mills in India in 1883 worked 6139 looms and 112,650 spindles, the and 1883 total quantity of raw jute worked up in the year being returned at 2,831,778 cwts These figures are below the mark, as certain companies and private individuals have not supplied full information The jute manufacturing industry afforded employment to 47,868 men, women, and children in 1882-83

The activity of the jute trade, and the general direction of Indian and the exports, will be seen by comparing the figures for 1877-78 consump and 1882-83 in the two following paragraphs

In 1877-78, 3 million bags were brought into Calcutta from 1878, Pabna District, being the product of the Sirájgani mills The total exports from Calcutta by sea and land of both power-loom and hand-made bags numbered 80 millions in 1877-78, of which not more than 6 millions were hand-made The East Indian Railway took 20 millions for the grain marts of Behar and the North-Western Provinces (chiefly Patná and Cawnpur), and I million went as far as Ludhiana in the Punjab total exports by sea in 1877-78 exceeded 57 millions, of which 32 millions represent interportal, and 25 millions foreign Bombay took as many as 16 millions, and British Burma 12 millions In fact, Calcutta supplies bagging for the whole of India.

In 1882-83, besides the local manufactures in Calcutta, and 1883 28,972,920 bags were imported into that city from the interior Districts, of which 12,494,243 were power loom and 16,478,677 The total exports from Calcutta of power-loom hand-made and hand-made bags numbered 123,219,477 bags internal trade, the East Indian Railway carried 16,808,855 bags for the following marts and Districts -Patná (3,189,970), Cawnpur (2,583,210), Faizábád (959,455), Delhi (676,375), Santál Parganas (623,945), Monghyr (609,875), Bírbhúm (558,915), and Bardwan (544,355) The total internal

exports by rail, boat, and road amounted to 18,877,715 bags The exports by sea numbered 104,341,762 bags, of which 45,018,180 represented coasting, and 59,323,573 foreign exports

The foreign jute trade may be given in greater detail, for

Sea boine exports of jute

the trade

gunny-weaving is perhaps the single Indian manufacture that has secured a great foreign market. The sea borne export of jute manufactures (bags and cloth) in 1872-73 was valued at £,188,859 By 1878-79, the value had risen to Growth of £1,098,434, and by 1882-83 to £1,487,831, or an increase of £389,397 in four years These figures seem to justify Mr O'Conor's statement in his Review of Indian Trade for 1878-79, that 'there is little room to doubt that in course of time India will be able, not only to supplant the manufactures of Dundee in the American and other foreign markets, but to supply England herself with bigs more cheaply than they can be made in Dundee' On the other hand, it must be recollected that large figures, and even growing figures, do not necessarily show that a business is remunerative like Bombay, sometimes suffers from the mismanagement incidental to joint-stock enterprises The principal countries which take Indian gunny-bigs are —Australia, £714,747 in 1882-83, Straits Settlements, £189,869, United States (California), £, 164,405, China, £, 173,295

Lrewing

51a 15'1C' of Indian brewing 1877-83

Brewing has been established on a large scale at the hill stations for several years There were in 1882-83, 22 breweries in India, 12 in the Punjab and the North-Western Provinces, at Mari (Murree), Simla, Solon, Kasauli, Dalhousie, Masuri (Mussoorie), Náini Tal, Chakrata, and Ranikhet, 2 in Bombay, at Moody Bay and at Bandora, 3 in Madras, at Utakamand and Coonoor, 4 at Bangalore in Mysore, and 1 at The total quantity of beer brewed was returned at 2.162.888 gallons in 1877, and 2,507,208 gallons in 1882-83 The quantity imported into India in 1878-79 was 2 million gallons by Government, and I million gallons on private In 1882-83, the Government imports were just under 11 million gallons, and the private imports a little over 1 million gallons, total 2,656,788 gallons, so that the Indian breweries now satisfy one-half of the entire demand. Indian brewed beer is rising in public favour, and is rapidly superseding imported beer for commissariat purposes. In 1875, 340,005 gallons of Indian beer were purchased by the Bengal Commissariat Department, in 1883, the quantity thus purchased was 1,936,221 gallons, as against 1,486,234 gallons imported by Government

At Simla, imported beer sells at over 18s per dozen quarts, Beer while that from the local breweries can be obtained for 10s per prices dozen. The hops are entirely imported. An experimental hop plantation of 100 acres established by the Mahárájá of Kashmír has not yet proved a practical success, but efforts are still being made, both in Kashmir and in India, to successfully introduce the hop plant into the country. The imports of hops show an increase from 1529 cwts in 1875–76, to Hop 1807 cwts in 1876–77, and 2135 cwts in 1877–78. In imports 1882–83, however, the import of hops had fallen to 1940 cwts valued at £42,983

The steam paper mills established in the neighbourhood of Paper Calcutta and at Bombay have almost entirely destroyed the making local manufactures of paper which once existed in many parts of the country. The hand-made article, which was strong though coarse, and formed a Muhammadan speciality, is now no longer used for official purposes

The Government possesses a large leather factory at Cawn-Leather pur, which turns out accourtements, saddlery, etc., of excellent quality. Two large European firms have also established leather factories at Cawnpur Indeed, leather hand-manufactures have long been an important local industry in Oudh and the North-Western Provinces. They are worked so cheaply as to discourage importation from England, except in the case of articles de luxe, and saddlery or harness for the richest classes.

Rice-husking by steam machinery is largely carried on at the Rice ports of British Burma

# CHAPTER XXI

### MINES AND MINERALS

Mines and THE Indian peninsula, with its wide area and diversified minerals features, supplies a great store of inineral wealth this wealth, English enterprise has met with many rebuffs Capital has been expended in many cases with no result except disappointment. But the experience has not been thrown away, and mining industry, now established on a sure basis, is gradually rising into an important position

Indian רנ זו

In purity of ore, and in antiquity of working, the iron deposits of India rank among the first in the world to be found in every part of the country, from the northern mountains of Assam and Kumáun to the extreme south of Madras Wherever there are hills, iron is found and worked

nicthods

Indigenous to a greater or less extent. The indigenous methods of smelting the ore, handed down unchanged through countless generations, yield a metal of the finest quality in a form well But they require an extravagant supply suited to native wants of charcoal, and notwithstanding the cherpness of native labour, the product cannot compete in price with imported iron from England European enterprise, attracted by the richness of the ore and the low rate of wages, has repeatedly tried to establish ironworks on a large scale But hitherto each of these attempts has ended in failure

Failure of Lnglish efforts. 1825.

The most promising early efforts were those undertaken in Madras by Mr Heath of the Civil Service, the anticipator of the Bessemer process In 1825, he founded a company which opened works at Porto Novo on the Coromandel coast, in the hills of Salem District, and at Beypur in Malabar The iron and steel produced were of first-rate quality, and all went well so long as an unlimited supply of charcoal could be obtained in the neighbourhood of the furnaces when this essential condition of cheap production gradually ceased, the enterprise became unremunerative, and had to be abandoned Within the last few years, an attempt has been made to smelt ore by means of coal, according to English

1880

methods, in the neighbourhood of Raniganj and in Bírbhum and Mánbhúm Coal abounds, and also limestone as a flux, but in this case, again, the company made no profit, and has been compelled to wind up Similar experiments in the Central Provinces and in Kumaun have met with similar results

In 1882-83, the Bengal Government took over the works Efforts by of the suspended Barakhar Iron Company at Khenduá in Manbhúm District, and cast and pig iron is now manufactured on the spot. The iron-works are doing a considerable amount of good, as not only do they encourage the private coal companies in the neighbourhood, but they also give employment to a large number of skilled workmen. They also promise to be remunerative, and the question of the expansion of the works is (1884) under the consideration of Government. With the exception of these works, iron in India is manufactured only by peasant families of smelters, each working on a very small scale.

The initial difficulty in India is to find the three elements Difficulties of iron-working, namely, the ore, the flux, and the fuel, sufficiently near to each other. The second difficulty is the choking works of the furnaces from the excessive quantity of ash in the coal

Coal has been known to exist in India since 1774, and is Indian said to have been worked as far back as 1775 The first coal English coal-mine was opened at Ranigani in 1820 now (1885) 65 working collieries in the country, with an annual out-turn of about 1 million tons In India, as elsewhere, coal and railway extension have gone hand in hand Coal is comparatively worthless unless it can be brought to market by rail, and the price of coal is the chief element in determining the expenses of rulway working The history of coal in India History of is, on the whole, a record of continual progress The first Bengal coal mine, as already mentioned, dates from 1820, and it has been mining, worked regularly up to the present time In 1878, its out-1820. put was 50,000 tons Until about 1840 no other mine was opened, but the commencement of the East Indian Railway in 1854 gave a fresh impetus to the industry, and since that 1854, date collieries have been set on foot at the rate of two or three every year The largest number of additions was seven in 1874 From these are supplied not only the railway itself, but also the jute mills of Calcutta, and the river steamers of Lower Bengal

In 1883, there were in all 62 working collieries in Bengal, 1883, besides 15 others, principally in the Santal Parganas, which were either closed, or were not working during the year. The

Raniganj Sub-division, with its 50 working collieries, had an output of 603,501 tons in 1883, as compared with an average output of 547,930 tons in the previous three years mines were opened during the year Hazáribagh and Manbhum Districts contain 6 collieries, which yielded an out-turn of 559,849 tons in 1883, against an annual average for the three previous years of 502,860 tons The East Indian Railway Company's valuable mines at Karharbarí and Srirampur are situated within Hazaríbagh District In 1883, these two mines yielded a total output of 308,000 tons, against an average of 274,087 in the three previous years The total out-turn from all the working mines in Bengal in 1883 was 1,200,057 tons, against an average of 1,058,084 tons for the three previous years 1882-83, the imports of coal into Calcutta by sea were only 74.610 tons, so that Bengal now uses locally about 94 per cent of Indian to about 6 per cent of foreign coal and Madras are entirely supplied with coal from England

The collienes in the Central Provinces, the only other

Imported coal

Coalmining in Central

coiliery,

Indian ones worked on a large scale, are limited to the supply Provinces, of the Great Indian Peninsula Railway They consist of— (1) the Warora colliery in Chanda District, under the management of the Public Works Department, and (2) the Mohpaní colliers, which has been leased to the Narbada Coal Company (1) Walorg In 1878-79, the Warorá colliery put out 43,000 tons, of which 11,000 tons consisted of slack. The gross receipts were £18,686, and the net receipts £5873, being about 83 per cent on the estimated capital expenditure of £70,000 In 1883, the Government mine at Warora yielded an out-turn of 95,738 tons, and averaged 51,376 tons in the previous three years. The profits are estimated at 4 to 6 But it is difficult to fix the sum, as the accounts are mixed up with those of the Wardha State Railway, a branch from the Nagpur line of the Great Indian Peninsula Railway Cost of raising coal in the Central Provinces, Rs 2 10 (5s 3d) per ton, price paid by the Railway Company for large coal, Rs 5 (10s) per ton In 1877-78, the cotton mills at Nazpur took 4872 tons

(2 Mch j ani colnery

The Mohpani colliery had an output in 1878-79 of 8000 tons, valued at £8000 In 1883 the total output from Mohpání mine was 19,281 tons, as against an average of 13,714 tons in the pre-ious three years. Almost the whole of this was taken by the Great Indian Peninsula Railway I stensive coal fields have recently been discovered at Umaria. within the Native State of Revá, only 34 miles beyond the

northern boundary of the Central Provinces, which are believed to extend into the northern portion of Jabalpur

The principal drawback of Indian coal is its large proportion Excessive of ash, varying from 14 to 20 per cent, as against 3 to 6 per ash of Indian cent in English coal This places Indian coal measures at coals a great disadvantage, alike for iron-smelting and locomotive purposes But it has been proved that, with efficient firegrates and proper manipulation, 135 lbs of Warora coal will do the work of roo lbs of English coal

The Ránigani coal-field has been estimated at an area of 500 Ranigani square miles In this 'black country' of India, which is dotted coal field with tall chimney-stalks, many European companies are at work, besides many native firms 1 At first coal was raised from open workings, but regular mining is now carried on, according to the system known as 'pillar and stall The seams are entirely free from gas, so that the precautions usual in England against explosion are found unnecessary. The miners are all drawn from the aboriginal races, chiefly Santals and Bauris, who are noted for their endurance and docility Bauris work with the pick, but Santáls will consent to use no other instrument than the crowbar Wages are high, and the men look well-fed, although they waste their surplus earnings in drink

The coal fields of India lie almost entirely in the broad Distribu centre of the peninsula, between the Ganges and the Godavari tion of

South of the Godávari no carboniferous strata exist, and the India whole Presidency of Madras is thus compelled to depend for its supply upon importation. North of the Ganges, the only extensive fields are to be found in the outlying Province of Outlying Assam There, in the Khasi and Jaintia Hills, mines have beds in been worked on a small scale for many years, but the aggregate of the deposits is insignificant, and the difficulties of carriage almost insurmountable Still farther away, in the frontier District of Lakhimpur, a large coal-field of excellent quality was discovered at Mákum, and a private company has been established with a view to open out the field, by means of a railway The company obtained a lease of the coal-beds for a period of twenty years, and a light railway has been constructed to the mines Operations have not yet been carried

1 For a full account of the Ranigani coal field, see article RANIGANI in The Imperial Gazetteer, and for its geological aspects, see a subsequent chapter

sufficiently far to justify any forecast as to the profitable work-

ing of these deposits In 1883–84, the out-turn from the Mákum mines was about 450 tons a week, but the company hopes to increase the out-turn to 3000 tons a week, which it is estimated will allow the mines to be worked at a fair profit Coal is also found in the neighbourhood of Dárjíling, and in the Salt Range of the Punjab

Darjiling, Punjab

The four great coal fields

Apart from these outlying beds, the central coal-fields of India have been divided by Mr Blanford, of the Geological Survey, into the four following groups—(1) The Dámodar valley, including both Ranfganj and Karharbari, which yields at least nine-tenths of all the coal as yet produced in India, and finds a ready market at Calcutta—(2) The Chutia Nágpur group, extending over a wide area of mountainous and difficult country, as yet but imperfectly explored—(3) The Narbada valley, south of the Sátpura range, where actual borings have hitherto proved disappointing, except in the case of the Mohpaní colliery, which is connected by a short branch with the main line of the Great Indian Peninsula Railway—(4) The Godavari valley, where coal has been traced from Nágpur southwards as far as Ellore In this coal-field the only successful works are at Warorá

Future of Indian coal Of the future of Indian coal it is difficult to speak with certainty. On the one hand, the demand is constant, and increases with the construction of every fresh mile of railway, and every new factors. On the other hand, the quality is distinctly inferior to English coal, which comes out to India at a low freight—almost at bullest rates. Ranigany coal, which is the best of the Indian coals, can do only from one-half to two-thirds of the duty performed by the same amount of Finglish coal. It contains a low proportion of fixed carbon, and more than three times the average percentage of ash

Indian salt

Its three sources

Salt, an article of supreme necessity to the Indian peasant, who eats no butcher's meat, except a festival goat or kid at rare intervals, is derived from three main sources, exclusive of importation from Europe 1 (1) By evaporation from seawater along the entire double line of seaboard from Bombay to Orissa, but especially in Gujarát and on the Coromandel coast (2) By evaporation from inland sait lakes, of which the Sambhar Lake in Rajputána affords the chief example. The right of working this lake was leased by Government in 1870 from the Mahárájás of Jaipur and Jodhpur, within whose territories it is situated, and who are paid a royalty upon the out-turn (3)

1 For the administrative aspects of Indian salt, see ante, chap xvi , and for its geological aspects, post, chap xxii

By quarrying solid hills of salt in the north-east of the Punjab The last is the only source in which salt in India can be said to exist as a mineral It occurs in solid cliffs, which for extent and purity are stated to have no rival in the world Range runs across the two Districts of Jehlam (Jhelum) and The Pun Shahpur, from the bank of the Jehlam river to Kálabagh in Jab salt Bannu District Similar deposits are found beyond the Indus range in Kohat District, where the salt is of two kinds, red and green, and in the Hill State of Mandi bordering on Kangra District The salt is found in the red marks and sandstones of the Devonian group In some cases it can be obtained from open quarries, but more generally it is approached by regular mining by pick and blasting, through wide galleries principal mine is at Kheura in Jehlam (Jhelum) District, now called after Lord Mavo The total annual out turn in the Punjab is returned at about 50,000 tons, yielding an average net revenue to Government of from £,300,000 to £,350,000

In Southern India, salt made by evaporation is almost Saltsupply universally consumed Lower Bengal, and especially Eastern of Madras Bengal, use salt imported from Cheshire, at low rates of gal freight, and paying the excise duty at Calcutta or other port of In Orissa and South-Western Bengal, both imported salt and salt made by solar evaporation are consumed, the solar salt being alone considered pure for religious purposes or for the puests

India has almost a monopoly of the supply of natural Indian saltpetre, upon which Europe largely depends for the manu-saltpetre facture of gunpowder It occurs with other saline substances is a white efflorescence upon the surface of the soil in many parts of the country, especially in the upper valley of the Its preparation leaves common salt as one of the residuary products, and fiscal restraints have accordingly tended to limit the manufacture to the most remunerative region, which is found in North Behar

The system of saltpetre manufacture is simple, and is System entirely in the hands of a special caste of natives, called of manu facture Nunivas, who are conspicuous for their capacity of enduring hard work As is the case with most Indian industries, they work under a system of money advances from middle-men, who are themselves sub-contractors under large central houses In former times, the East India Company engaged of business in the manufacture on its own account, and when it gave up its private trade, the works were taken over by European firms

But these have in their turn retired from the business, which is now in a state of decline (almost killed in Southern India), partly owing to the general fall in price, and partly to the restrictions imposed by the salt preventive department

Process of manu facture

The manufacturing season begins with the cold season in November The presence of saltpetre in the soil is revealed by efflorescence after a heavy fall of rain This earth is scraped together, and first placed in a large vessel, through which water is filtered The brine is then boiled in pots, and crude saltpetre mixed with common salt is the result proportion of salt to saltpetre is said to be about one-sixth The sale of this salt is prohibited under stringent penalties The crude saltpetre is now handed over to the refiners, who work on a larger scale than the Nunwas It is again subjected to a process of boiling in large iron boilers of English manu facture, and is allowed to crystallize gradually in open wooden In refining, it loses nearly one-half its weight, and is now ready for the market In 1873, the single District of Tuhút contained 22,528 filters, and 305 refineries

Exports of salpetre

The exports of saltpetre from Calcutta und furly constant, everying about 450 000 cwts a year, of which one-half goes to the United Kingdom. More than two thirds of the total comes from Behal, chiefly from the Districts of Tirhut, Saran, and Champaran, though Pathá is the railway station for despatch to Calcutta. Campur Ghazipur, Allahábad, and Benares, in the North Western Provinces, send small quantities, while a little comes from the Punjab

In lian gold Although silver has ever been the currency of India in his torical times, that metal is nowhere found in the country, nor in the adjoining States of Central Asia. Gold, on the other hand, exists in many parts of India, and probably in large quantities. The 'Ophir' of King Solonion has been identified by some scholars with the Malabar coast. However that may be, India claims to rank as a gold producing country. Many hill streams are washed for gold, alike in the extreme south, in the central plateau, and on the north east and north west frontiers. Gold washing is everywhere in India a miserable business, affording the barest livelihood, but the total amount of gold obtained cannot be insignificant.

Caold mining in Madras In recent years, attention has been prominently drawn to the possibility of extracting gold from the quartz formation of Southern India, which bears many points of resemblance to the auriferous quartz reefs of Australia The principal localities are in the Wainad (Wynaad) Sub-division of the Nilgiri District, and in Kolar District of Mysore Gold-washing has always been practised here, and the remains of old workings show that at some unknown period operations have been conducted on a large scale Since about 1870, individual pioneers have been prospecting in this region Crushing the quartz by rude native methods, they proved that it contained a larger proportion of gold than is known to give a profit in Australia These experiments on the southern ends of six reefs yielded an average of 7 dwts per ton of quartz, rising in one case to 11 dwts The best assay of the gold showed a fineness of slightly over 20 carats In 1879, Government summoned a practical mining engineer from Australia, whose report was emmently hopeful He described the quartz reefs as of great extent and thickness, and highly auriferous One reef in Kolar, laid bare 100 feet longitudinally, had given an average of 1 oz of gold per ton In order to attract capital, Government proposed to grant mining leases at a dead rent of Rs 5 (10s) per acre, subject to no royalty or further tax Several English companies with large capital entered the field, and the reports of their professional advisers held forth high hopes of success Those hopes have not, however, been yet realized Gold-mining in Southern India is in a depressed state, although some of the operations again hold out promise of success (1885)

The other Indian metals comprise copper, lead, and tin Other Copper exists in many parts of the country in considerable metals quantities. The richest mines are in the lower ranges of the Copper Himalayas, from Dárjiling westward to Kumaun. The ore occurs in the form of copper pyrites, often accompanied by mundic, not in true lodes, but disseminated through the slate and schist. The miners are almost always Nepalis, and the Nepáli remotences of the situation has deterred European capital miners. The extent of abandoned workings shows that these mines have been known and worked for many years. The best seams show a proportion of copper slightly above the average of Cornish ore, but the ordinary yield is not more than about 4 per cent.

The mines resemble magnified rubbit holes, meandering 'Rabbit-passages being excavited through the rock with little system hole' mines. The tools used are an iron hummer and chisel, with sometimes a small pick. After extraction, the ore is pounded, washed, and smelted on the spot. The price obtained NOL VI.

Singbhúm copper

for the metal is Rs 2 8 per 3 sers, or at the rate of about 10d a pound Copper-ore, of fair purity and extending over a considerable area, also occurs in Singbhúm District of Chutiá Nagpur, where there are many deserted diggings and heaps of scoriæ. In 1857, a company was started to reopen the workings at these mines, but although large quantities of ore were produced, the enterprise did not prove remunerative, and was finally abandoned in 1864. A similar attempt to work the copper found in Nellore District in Madras also

Nellore

ended in failure. Lead

Tin

Lead occurs, in the form of sulphuret or galena, along the Himálayas on the Punjab frontier, and has been worked at one place by an English company Tin is confined to Very rich deposits, yielding about the Burmese peninsula 70 per cent of metal, occur over a large extent of country in Mergui and Tayoy Districts of the Tenasserim Division ore is washed and smelted, usually by Chinese, in a very rough and unscientific way Recent experiments by a European firm tend to show that the deposits, although rich and extensive, are not sufficiently deep to repay more elaborate processes

Antimony Antimony, in the form of surmá, largely used by the natives as a cosmetic for the eyes, is chiefly derived from the hill States of the Punjab It is also found in Mysore and Burma The minerals of Raiputana have not yet been thoroughly investigated, but they include an ore of cobalt, used for colouring enamel

Col alt

l'ctroleum. Petroleum is produced chiefly in Independent Burma, but it has also been found in British Burma, in Assam, and in the Punjab Near the village of Ye-nan-chaung in Upper in Burma, Burma, on the banks of the Irawadi, there are upwards of

100 pits or wells with a depth of about 250 feet, from which petroleum bubbles up in inexhaustible quantities The annual vield in 1877 was estimated at 11,000 tons, of which a considerable quantity was exported Petroleum wells are also found in the British Districts of Akyab, Kyauk pyu (Kyouk-hpyu), Pegu, and Thavet-myo, which first attracted British capital with most promising results in 1877

Oil refin me in Burma.

Two private oil refining companies having obtained a lease from Government, under favourable conditions, of certain areas at Minbyin in Ramri island, Kyauk pyu District, are working a number of wells by means of steam boring machinery, under the superintendence of Canadian experts, with satisfactory results. The oil when refined is of a high quality, but

the expensiveness of the machinery and costly European agency have so far proved an obstacle to the financial success of the industry The native oil-wells are constructed and managed on much more economical principles than the English companies, and many of them yield large profits

The principal English company, the Boronga, has (1884) Chief oil 24 wells, one of them having a depth of over 1200 feet. com Only 10 were at work in 1883-84, yielding an out-turn of 234,000 gallons of oil, of which 65,400 gallons was refined, and the remainder sold in a crude state, the total realizations for the year being about £6000 The Arakan Oil Company, newly started, yielded during 1883-84 an out-turn of 107,800 gallons from 5 wells out of 7 sunk by them, the deepest being 400 feet, all of which was sold on the spot in its crude state native wells, bored by means of locally-made tools, windlasses, and sheers, run down to a depth of 250 to 350 feet. The total out-put of the whole field, including English companies and native wells, numbering about 170 in all, during the year, was 404,325 gallons The imports of crude oil from the Ye-nanchaung wells in Upper Burma were 968,210 gallons, most of which was taken by the Rangoon refinery, which produced 640,000 gallons of refined oil during the year

In Assam, petroleum occurs in the neighbourhood of the in Assam, coal-fields in the south of Lakhimpur District It was formerly worked in connection with the coal by a private European capitalist, but the enterprise failed to prove a success Government concession to work the oil beds was granted to the Assam Railways and Trading Company, along with the Makum coal-fields, but up till 1884 no attempt had been made by the company to work the oil In the Punjab, in Punjab petroleum is worked experimentally by the Public Works Department at two spots in Rawal Pindi District In 1873-74, the total yield was 2756 gallons, and in 1882-83, 5000 gallons Petroleum is also found in Bannu District, and probably in other neighbouring Districts of the Punjab

The commonest and also the most useful stone of India is Stone, etc kankar, a nodular form of impure lime, which is found in almost every river valley, and is used from one end of the peninsula to the other for metalling the roads Lime for building Lime (chunám) is derived from two sources—(1) from burning limestone and kankar, and (2) from the little shells so abundantly found in the marshes, rivers, and lakes. Calcutta derives its chief supply of limestone from the quarries of the Khásí

Kankar

Pottery.

Hills in Assam, known as 'Sylhet lime,' and from the Susuniá quarries in Bankurá District Except for occasional beds of kankar, the lower valley of the Ganges is absolutely destitute of stone, nor does the alluvial soil afford good materials for brickmaking or fine pottery But a European firm has recently established large pottery and cement works at Ránígani in Bardwan, which employ about 500 hands, and carry out contracts for drainage pipes and stoneware These works are annually increasing in importance and value

Building stone

Marble

The centre of the peninsula, and the hill country generally, abounds in building stone of excellent quality, which has been used locally from time immemorial Among the finest stones may be mentioned—the pink marble of Rájputána, of which the historical buildings at Agra were constructed, the trap of the Deccan, the sandstone of the Godávari and the Narbada, and the granite of Southern India Quarries of slate are scattered through the peninsula, and sometimes worked by European capital Mica and talc are also quarried to make ornaments Among the hills of Orissa and Chutiá Nagpur, household vessels and ornaments are skilfully carved out of an indurated variety of potstone

Slate Mica and talc

Precious stones

Despite its legendary wealth, which is really due to the accumulations of ages, India cannot be said to be naturally prolific in precious stones Under the Muhammadan rule, Diamonds, diamonds were a distinct source of State revenue, but at the present day, the search for them, if carried on anywhere in British territory, is too insignificant an occupation to have attracted the notice of Government The name of Golconda has passed into literature, but that city, once the Musalmán capital of the Deccan, was rather the home of the diamondcutters than the actual source of supply It is believed that the far-famed diamonds of Golconda actually come from the sandstone formation, which extends across the castern borders of the Nizám's Dominions into the Madras Districts of Kistna and Godávari A few worthless stones are still found in this region

at Gol conda.

ın Sam balpur,

Sambalpur, on the upper channel of the Mahánadi river in the Central Provinces, is another spot once famous for diamonds In the last century, a British officer was despatched to Sambalpur by Clive to arrange for remittances home by means of Sambalpur diamonds As late as 1818, a stone is said to have been found her weighing \$4 grains and valued at £500 The river valleys of Chutia Nagpur are also known

to have yielded a tribute of diamonds to their Muhammadan conqueror

At the present day, the only place where the search for diamonds is pursued as a regular industry is the Native State of Panna (Punnah) in Bundelkhand The stones in Bun are found by digging down through several strata of gravelly delkhand soil, and washing the earth Even here, however, the pursuit is understood to be unremunerative, and has failed to attract European capital

About other gems very little information is available town of Cambay in Gujarát (Guzerát) is celebrated for its Caine carving of carnelian, agate, and onyx The stones come from lians the neighbourhood of Ratanpur, in the State of Raipípla They are dug up by Bhil miners, and subjected to a process of burning before being carved The most valued colour for carnelians is red, but they are also found white and yellow Lapis lazuli is found in the mountains of the north, and is freely used in the decoration of temples and tombs

Inferior pearl fisheries are worked off the coast of Madura Pearl District in the extreme south, and in the Gulf of Cambay, fisheries but the great majority of Indian pearls come either from Ceylon (which is also rich in other gems) or from the Persian Gulf In the year 1700, the Dutch obtained a lease of all the pearl fisheries along the Madura coast, and sublet the right of fishing to native bottmen, of whom 700 are said to have taken licences annually at the rate of 60 icus per boat

We have now sketched the physical aspects of India, its Scientific past history, and its present administration and condition branches under British rule It remains to briefly deal with the topics subject of scientific interest connected with the country its material framework or geology, its climatic conditions, or meteorology, its animal and vegetable products, and the health statistics of its population Each of these subjects forms the subject of many elaborate volumes, and the adequate treatment of any one of them would demand a body of scientific condutors not available to the author of this work. But some account of them may be useful for administrative purposes

The following pages are offered, not for the instruction of Scope specialists, but to the general reader who wishes to study of the following India in all its various aspects. In previous sections, the chapters author has not hesitated to repeat himself when dealing with Indian products, such as opium, cotton, and salt, first from

the administrative and then from the economic point of view For he believes that such repetitions are convenient to many who desire a view of the subject under each head. In like manner, the following sections will not shrink from repetitions, in referring to certain productions, such as coal, iron, or forests, in their scientific aspects

## CHAPTER XXII

### GEOLOGY OF INDIA

For geological purposes British India may be mapped out into the four geographical divisions of—the Himalayan region, the Indo-Gangetic plain, Peninsular India, and Burma 1

THE HIMALAYAN REGION —The geology of this tract is more Hima complex and less fully known than that of the Peninsular layas area Until the ground has been carefully gone over by the Geological Survey, many points must remain doubtful, and large areas of the Himálayas (Nepal and Bhután) are still inaccessible to Europeans The oldest rock of the Himálavas is a gness, differing in character from the gness of the Penin-Gness. sula, and from that of Assam and Burma The Himalayan gness is usually white and grey, its felspar orthoclase and albite, it contains much mica and mica schist, and is more uniform in character than the gneiss of the Peninsula latter is usually pink, its felspar being orthoclase and oligoclase, it contains little mica schist, but often has quartzite and hornblendic rock Hornblende occurs in the syenitic gneiss of the Northern Himalayan (or Ladakh) range

The Central Himalayan region may be described as con-Central sisting of two gneissic axes, with a trough or synclinal valley gneissic between them, in which fossiliferous beds have been deposited and are now preserved The gness of the southern or main axis (the 'central gneiss' of Dr Stoliczka) is the oldest, that of the northern or Ladákh axis comes next in age The gneiss of the Ladakh axis is generally syenitic, or is that variety of the Himalayan gneiss already described as containing hornblende It is probably an extremely altered condition of ordinary marine sediment The gneiss of the central axis is the ordinary kind, it is penetrated by granite, which ranges along some of the highest peaks Between these two gnessic

1 This section is based upon the official Manual of the Geology of India, by Messrs H B Medhcott and W T Blanford, 2 vols, Government Press, Calcutta, 1879 Mr W Topley, of the English Geological Survey, conducted the preliminary condensation

ares occurs the basin shaped valley, or the Hundes and Zanskar synclinal. In this valley tossilitations rocks are preserved, giving representatives of the Silurian, Carboniferous, Triassic, Jurassic, and Creticeous formations. All these seem there to have followed each other without important breaks or unconformities, but after the deposition of the Cretaceous rocks of the Himalayan region, important changes appear to have taken place in its physical geography. The Nummulitic (Eocene) strata were laid down on the eroded edges of some of the older beds, and in a long trough within the Silurian gneiss of the Ladakh axis.

Lower Hima layas

On the south of this true Himálayan region there is a band of country known as the Lower Himalaya, in which the beds are often greatly disturbed, and even completely inverted, over great areas, the old gness apparently overlying the sedimen-This Lower Himalayan region is about 50 miles wide, and consists of irregular ridges, varying from 5000 to 8000 feet in height, and sometimes reaching 12,000 feet Resting upon the gneiss, but often through inversion apparently underlying it, in the neighbourhood of Simla, is a series of unfossiliferous beds (schists, quartzites, sandstones, shales, limestones, etc.) known in descending order as the Krol, Infra-Krol, Blaini, and Infra Blaini beds In the Krol beds is a massive limestone (Krol limestone) probably representing the limestone of the Pir Panjal range, which is most likely of Carboniferous age The Blaini and Infra-Blaini beds are probably Silurian

Krol limestone.

Sub Hima layas The Lower Himalayan range ends at the Sutley valley, west of which the continuation of the central range is followed immediately by the third or sub Himalayan range. This occurs almost always on the south of the I ower Himalayas, and is composed of later I ertirity rocks ("iwaliks, etc.), which stretch parallel with the main chain. Generally, the sub Himálayas consist of two ranges, separated by a broad, flat valley (dun or 'doon'), the southern slope, overlooking the great Indo-Gangetic plain, is usually the steepest. Below Naim Tall and Darifling (Darjeeling), the sub Himalayan range is wanting, on the Bhután frontier the whole range is occasionally absent, and the great alluvial plain slopes up to the base of the Lower Himálayan region

Siwálik beds It is within the sub Himálayan range that the famous Siwálik beds occur, long known for their vast stores of extinct mammalia. Of about the same age are the Manchhar beds of Sind, which also contain a rich mammalian fauna. The Lower Manchhars

probably correspond to the Náhan beds, the lowest of the Siwáliks, they rest upon the Gai beds, which are probably Upper Miocene From this it would seem that the lowest Siwáliks are not older than Upper Miocene The higher Siwálik beds are considered by Mr W T Blanford to be Pliocene, and to this later period he also refers the mammalian beds of Pikermi in Greece. These have a large number of fossils in common with the Siwaliks, but they contain, at their base, a marine band with Pliocene shells The Manchhar and Siwálik beds are chiefly of fresh-water origin

The Salt Range in the north-west of the Punjab has, in Salt addition to its economic value, a special geological importance Representatives of most of the great European formations of Silurian and later epochs are found in it, and throughout the vast length of time represented by these formations there is here no direct evidence of any important break in succession, or unconformity The lowest beds (salt marl, probably Silurian) and the highest (Siwaliks) are found through the range But the others cannot be traced continuously throughout, some occur well developed in one place, some in another All the principal fossiliferous beds of the Jurassic, Friassic, and Carboniferous formations are confined to the western part of the range

THE INDO-GANGETIC PLAIN covers an area of about 300,000 Indo square miles, and varies in width from 90 to nearly 300 Gangetic It rises very gradually from the sea at either end The lowest point of the watershed between the Punjab rivers and the Ganges is about 924 feet above sea level This point, by a line measured down the valley, but not following the winding of the river, is about 1050 miles from the mouth of the Ganges and 850 miles from the mouth of the Indus, so that the average inclination of the plain, from the central watershed to the Its slope sea, averages only about 1 foot per mile It generally exceeds to the sea this near the watershed, but there is here no ridge of high ground between the Indus and the Ganges, and a very trifling change of level would often turn the upper waters of one river into the other It is not unlikely that such changes have in Towards the sea, the slope becomes past time occurred almost imperceptible

I here is no evidence that the Indo-Gangetic plain existed as Its geo such in pre-Tertiary times The alluvial deposits made known logical age by the boring at Calcutta, have already been described in

deposits

Its alluvial sufficient detail 1 They prove a gradual depression of the area through the later Tertiary times There are peat and forest beds, which must have grown quietly at the surface, alternating with deposits of gravel, sand, and clay The thickness of the delta deposit is unknown, 481 feet was proved at the bore hole, but probably this represents only a very small part of the deposit Outside the delta, in the Bay of Bengal, is a deep depression known as the 'swatch of no ground', all around it the soundings give only 5 to 10 fathoms, but they very rapidly deepen to over 300 fathoms. The sediment seems to be carried away from this hole by the set of the currents, so that it has remained free from silt whilst the neighbouring sea-bottom has gradually been filled up If so, the thickness of the alluvium is at least 1800 feet, and may be much more

Its geo logical history

The Indo-Gangetic plain dates back to Eocene times, the origin of the Himálayas may be referred to the same period Numerous minor disturbances occurred in the area which is now Northern India during Palæozoic and Secondary times, but the great disturbance which has resulted in the formation of the existing chain of the Himalayas took place after the deposition of the Eocene beds Disturbances even greater in amount occurred after the deposition of the Phocene beds The Eocenes of the sub-Himálayan range were deposited upon uncontorted Palæozoic rocks, but the whole has since been violently contorted and disturbed There are some indications that the disturbing forces were more severe to the eastward during middle Tertiary times, and that the main action to the westward was of later date. It seems highly probable that the elevation of the mountain ranges and the depression of the Indo-Gangetic plain were closely related This view gains some support from a glance at the man, where we see that the curves of the great mountain chains are strictly followed by those of the great alluvial plain bably both are due to almost contemporary movements of the earth's crust, these movements, though now of greatly dimi nished intensity, have not wholly ceased The alluvial deposits prove depressions to have occurred in quite recent geological times, and within the Himálayan region earthquakes are still common, whilst in Peninsular India they are rare

Peninsular PENINSULAR INDIA — The oldest rocks here consist of gneiss, India. in three tracts -throughout a very large part of Bengal and

Madras, extending to Ceylon, among the Aravallı ranges, and in Bundelkhand Of these formations, the gneiss of Bundelkhand is known to be the oldest, because the oldest Transition rocks rest upon it, whereas the same Transition rocks are altered and intersected by granitic dykes which proceed from the gness of the other tracts The Transition rocks are of great but unknown age The Vindhyan rocks which succeed them are of very old Palæozoic age, perhaps pre-Silurian Yet long before the earliest Vindhyan rocks were laid down, the Transition rocks had been altered and In more recent times there have been local disturbances, and large faults have in places been found, but the greater part of the Peninsular rocks are only slightly disturbed, and the most recent of the great and widespread earth movements of this region date back to pre Vindhyan times

The Vindhyan series are generally sharply marked off from Vindhyan older rocks, although in the Godávari valley there is no rocks well-defined line between these and the Transition rocks. The Vindhyan beds are divided into two groups Lower, with an estimated thickness of only 2000 feet, or slightly Vindhmore, cover a large area,—extending, with but little change yans of character, from the Son (Soane) valley in one direction to Cuddapah, and in a diverging line to near Bijápur-in each case a distance of over 700 miles The Upper Vindhyans Upper cover a much smaller area, but attain a thickness of about Vindh 12,000 feet The Vindhyans are well-stratified beds of sand-yans stone and shale, with some limestones. As yet they have yielded no trace of fossils, and their exact age is consequently So far as the evidence goes, it appears probable that they are of very ancient Palæozoic age, perhaps pre-Silurian The total absence of fossils is a remarkable fact, and one for which it is difficult to account, as the beds are for the most part quite unaltered Even if they are entirely of fresh-water origin, we should expect that some traces of life from the waters or neighbouring land would be found

The Gondwana series is in many respects the most interest-Gondwana ing and important of the Indian Peninsula. The beds are series almost entirely of fresh water origin Many sub-divisions have been made, but here we need only note the main division into two great groups -Lower Gondwánas, 13,000 feet thick, Upper Gondwanas, 11,000 feet thick The series is mainly confined to the area of country between the Narbadá and the Son (Soane) on the north, and the Kistna (Krishna) on

the south, but the western part of this region is in great part covered by newer beds. The lowest Gondwanas are very constant in character, wherever they are found, the upper numbers of the lower division show more variation, and this divergence of character in different Districts becomes more marked in the Upper Gondwana series. Disturbances have occurred in the lower series before the formation of the upper

Gondwana fossils

The Gondwana beds contain fossils which are of very great In large part these consist of plants which grew near the margins of the old rivers, were carried down by floods, and deposited in the alluvial pluns, deltas, and estuarine areas of the old Gondwana period. So vast was the time occupied by the deposition of the Gondwana beds, that great changes in physical geography and in the vegetation repeatedly occurred The plants of the Lower Gondwanas consist chiefly of acrogens (Equisetaceæ and ferns) and gymnogens (cycads and conifers) the former being the more abundant. The same classes of plants occur in the Upper Gondwanas, but there the proportions are reversed, the conifers, and still more the cycads, being more numerous than the ferns, whilst the Equ settice are but sparingly found But even within the limits of the Lower Gondwana series there are great diversities of vegetation, three distinct floras occurring in the three great divisions of that formation In many respects the flora of the highest of these three divisions (the Panchet group) is more nearly related to that of the Upper Gondwanas than it is to the other Lower Gondwana floras

Panchet group

Talcher group One of the most interesting facts in the history of the Gondwana series is the occurrence near the base (in the Talcher group) of large striated boulders in a fine mud or silt, the boulders in one place resting upon rock (of Vindhyan age) which is also striated. I here seems good reason for believing that these beds are the result of ice-action. They probably nearly coincide in age with the Permian beds of Western Europe, in which Professor Ramsay long since discovered evidence of glaciation. But the remarkable fact is that this old ice-action occurred within the tropics, and probably at no very great height above the sea.

Damodar series and coal fields The Dámodar series, the middle division of the Lower Gondwanas, is the chief source of coal in Peninsular India, yielding more of that mineral than all other formations taken together. The Karharbári group is the only other coal-bearing formation of any value. The Dámodars are 8400 feet thick in the Ráni-

ganj coal-field, and about 10,000 feet thick in the Sátpura basin They consist of three divisions, coal occurs in the upper and lower, ironstone (without coal) in the middle division. The Ráníganj coal field is the most important in India. So far Raniganj as yet known, it covers an area of about 500 square miles, coal field running about 18 miles from north to south, and about 39 miles from east to west, but it extends farther to the east under the laterite and alluvium. It is traversed by the Damodar river, and also the road from Calcutta to Benares and by the East Indian Railway. From its situation and importance, this coal-field is better known than any other in India. Much has been learnt concerning it since the last examination by the Geological Survey, especially from the recent reports by Mr. H. Bauermann.

The upper or Raniganj series has eleven seams, with a Raniganj total thickness of 120 feet, in the eastern district, and thirteen seams, 100 feet thick, in the western district. The average thickness of the seams worked is from 12 to 18 feet, but occasionally a seam reaches a great thickness—20 to 80 feet. The lower or Barákhar series (2000 feet thick) contains four Barákhar seams, of a total thickness of 69 feet. Compared with English coals, those of this coal-field are of a poor quality, they contain much ash, and are generally non coking. The seams of the lower series are the best, and some of these at Sanktoria, near the Barákhar river, are fairly good for coke and gas

The best coal in India is in the small coal-field at Kaihar Karharbari. The beds here are lower in the series than field those of the Ráníganj field, they belong to the upper part of the Talcher group, the lowest of the Gondwana series. The Karharbari coal-beds cover an area of about 11 square miles, and have three seams, varying from 9 to 33 feet thick. The lowest seam is the best, and it is nearly as good as English steam coal. This coal field, now largely worked, is the property of the East Indian Railway, which is thus supplied with fuel at a cheaper rate than any other railway in the world. Indian coal usually contains phosphoric acid, which greatly lessens its value for iron-smelting.

The Damodar series, which, as we have seen, is the chief Damodar source of coal in India, is also one of the most important iron stone

<sup>&</sup>lt;sup>1</sup> The economic aspects of Indian coal have been dealt with in the chapter on Mines and Minerals. For full accounts of the Indian coal fields, see articles RANIGANJ, KARHARBARI, etc., in *The Imperial Gautte*, of India

sources of iron The ore occurs in the middle division, coal in the highest and lowest. The ore is partly a clay ironstone, like that occurring in the coal-measures of England, partly an oxide of iron or hæmatite It generally contains phosphorus, which prevents its use in the preparation of the finer qualities of steel A similar difficulty attends the use of the Cleveland ore of North Yorkshire Experiments have been in progress for years in search of a process which shall, in an economical manner, obtain iron from Cleveland ore free from phosphorus, latterly, it is hoped, with some success be so, India will be a great gainer Excellent iron-ore occurs in the metamorphic rocks south of the Dámodar river Laterite (see below) is sometimes used as ore. It is very earthy, with a low percentage of metal, but it contains only a comparatively small proportion of phosphorus 1

Kankar

The want of limestone for flux, within easy reach, is generally a great drawback as regards iron smelting in India Kankar or ghutin (concretionary carbonate of lime) is collected for this purpose from the river beds and alluvial deposits It sometimes contains as much as 70 per cent of carbonate of lime, but generally the proportion is much less, and the fluxing value proportionally diminished The real d fficulty in India is to find the ore, the fuel, and the flux, in sufficiently close proximity to yield a profit

Deccan trap

The enormous mass of basaltic rock known as the Deccan trap, is of great importance in the geological structure of the Indian Peninsula It now covers an area of about 200,000 square miles, and probably extended in former times over a much wider area. Where thickest, the traps are at least 6000 feet in depth They form the most striking physical features of the country, many of the most prominent hill ranges being the denuded edges of the basaltic flows great volcanic outbursts which produced this trap commenced in the Cretaceous period, and lasted into the Eocene period

Laterite .

Laterite is a ferruginous and argillaceous rock, varying from 30 to 200 feet thick, which often occurs over the trap area. but is also found in other tracts. As a rule, it makes rather barren land, it is highly porous, and the rain rapidly sinks into it Laterite may be roughly divided into two kinds, high level, high-level and low-level laterite. The former, which covers a large area of the high basaltic plains, is believed by Mr R B

> <sup>1</sup> For the economic aspects of Indian iron, see chapter on Mines and Minerals

Foote to be very frequently the product of decomposition of the trap, and to have been thus formed in the place where it is now found Sometimes the high-level laterite overlies gneiss or other rocks, and in these cases it has probably been transported The low-level laterite is generally more low level. sandy in character, and is often associated with gravels most cases this has clearly been carried down to its present position, probably largely by sub-aerial action, aided by rains and streams Possibly in some cases it has been spread out along the coasts by marine action. The low-level laterite fringes the coast of the Peninsula, from near Bombay on the west and Orissa on the east, to Cape Comorin It is not continuous throughout these regions, and it is of very varying width and elevation The age of the high level laterite is unknown Its formation probably extended throughout a long period of time, much of which must be of very ancient date, for the laterite, together with the underlying basalt, has suffered extensive denudation

As regards gems, the geologist comes to the same con-Precious clusion as the economist, viz that the precious stones stones of ancient India were the product of forced labour, and that the search for them in our days can scarcely repay the working expenses

British Burna—The geological structure of Burma com-Burma prises three sections—western, middle, and eastern, nearly its three corresponding to the Divisions of Arakan, Pegu, and Tenasserim

The geological groups met with in Arakan and Pegu are, Pegu and in the ascending order, as follow. The crystalline rocks of Arakan Taung-ngu, age undetermined, comprising beds of different ages. Axial or Arakan group, occupying the northern part of Arakan range, age probably Triassic. Nummulitic group, including the entire range of Arakan, age Eocene or early Tertiary. Pegu group, occupying the whole of the country cast of the Irawadi to the Sittaung river, age Miocene or middle Tertiary. Fossil-wood group, most largely developed in eastern Prome, in which fossil-wood, in the form of silicified trunks of trees, some of them 30 to 40 feet long, is plentifully present, age probably Phocene or newer Tertiary. Lastly, the Alluvium group, comprising older alluvial deposits in places where the river channels are excavated, and newer alluvial

deposits thrown down on the surface by the Irawadi and other rivers

Tenns serim In geological structure, Tenasserim is entirely distinct from Pegu and Arakan, the groups in ascending order are as follow The crystalline rocks, age uncertain. Mergui group, largely developed in Mergui District, age perhaps Silurian. Maulmain group, well seen near Maulmain and Amherst, age lower Carboniferous. Tenasserim group, embracing the various coalfields in the southern part of the Tenasserim Division, age doubtful, but probably Tertiary.

# CHAPTER XXIII

#### METEOROLOGY OF INDIA

THE great peninsula of India, with its lofty mountain ranges Meteoro and its extensive seaboard, exposed to the first violence of logy of the winds of two oceans, forms an exceptionally valuable and interesting field for the study of meteorological phenomena But the Department of Government which deals with these phenomena has had to contend with many obstacles, and it is only within the last few years that trustworthy statistics have been obtained from a complete system of registration stations Every year, however, is now adding to our knowledge of the meteorology of the country, and supplying authentic materials for purposes of comparison and induction

METEOROLOGICAL GLOGRAPHA —After the general description Meteoroof the country given at the beginning of this volume, it is only logical necessary to sketch very briefly the meteorological geography The following paragraphs are condensed from an interesting account in the official Report on the Meteorology of India (for 1883), by Mr H F Blanford Mr Blanford's volume on the Meteorology of India, being the second part of The Indian Meteorologist's Vade-Mecum (Government Press, Calcutta, 1877), should be in the hands of every student

The great mountain ranges of the HIMALAYAS and the SULAI-MANS, which form the northern and north-western boundaries of India, have been fully described 1 From the gorge of the Indus to that of the Dihong (Brahmaputra), a distance of 1400 miles, the Himálayas form an unbroken watershed, the northern flank Hima of which is drained by the upper valleys of these two rivers, lay as while the Sutley (Satlay), starting from the southern foot of the Kailás peak, breaks through the watershed, dividing it into two very unequal portions, that to the north-west being the The average elevation of the higher Himálayas may be taken at not less than 19,000 feet, and therefore equal to

1 Vide ante, chap 1 pp 3-10, also articles HIM LAYAS and SULAIMAN MOUNTAINS, The Imperial Garetteer of India

VOL VI

Hima layan au curients the height of the lower half of the atmosphere, indeed, few of the passes are under 16,000 or 17,000 feet. Across this mountain barrier there appears to be a constant flow of air, more active in the day-time than at night, northwards to the and plateau of Tibet. There is no reason to believe that any transfer of air takes place across the Himálayas in a southerly direction, unless, indeed, in those elevated regions of the atmosphere which lie beyond the sphere of observation. But a nocturnal flow of cooled air, from the southern slopes, is felt as a strong wind where the rivers debouch on the plains, more especially in the early morning hours. This current probably contributes to lower the mean temperature of the belt of plain country which fringes the mountain zone.

Eastern Hima layas The Eastern Himálayas present many points of contrast with the western parts of the range. The slopes of the Sikkim and Bhután Hills, where not denuded for the purposes of cultivation, are clothed with an almost impenetrable forest, which at the lower levels abounds in figs, rattans, and representatives of a tropical humid climate. At higher levels they are covered with oaks, chestnuts, magnolias, pines, etc., of the most luxuriant growth

Westeri Hima layas

In the Western Himalayas, on the other hand, the spurs of the outer ranges are more sparsely clad with forest, especially on their western faces, and naked precipitous crags are of constant occurrence. The vegetation of the lower and warmer valleys, and of the fringing belt (the Tarai), is comparatively thin, and such as characterizes a warm but dry region of several species form a conspicuous teature of the landscape at lower levels It is chiefly the outer ranges that exhibit these contrasted features, and they depend partly on the difference of latitude, but mainly on that of rainfall Sikkim and Bhutan this is abnormally copious, and is discharged full on the face of the range As the chain recedes to the north-west, the greater is the distance to be traversed by the vapour-bearing winds in reaching it, and the more easterly is their direction. For such winds, whether coming from the Bay of Bengal (apparently their principal source) or from the Arabian Sea, turn on reaching the Gangetic valley, and blow more or less parallel to its axis and that of the mountain range

Vapour bearing winds

Punjah frontier The country on either side of the Suláiman range is characteristically and Dry winds from the desert tracts of Persia and Baluchistán predominate throughout the year the scanty cultivation on the hills is dependent on the

winter snows, or the rare showers which reach them from the eastward, or the supply of the larger local streams lower plains would be uninhabitable but for the fertilizing irrigation furnished by the great river that traverses them

At the foot of the great Himalayan barrier, and separating it from the more ancient land which now forms the highlands of the peninsula, a broad plain, for the most part alluvial, stretches Indus from sea to sea On the west, in the dry region, this is plain occupied partly by the alluvial deposits of the Indus and its tributaries, partly by the saline swamps of Kachchh (Cutch), and the rolling sands and rocky surface of the desert of Jassalmer The great (Jeysulmere) and Bikaner, and partly by the more fertile Indian desert tracts to the eastward Over the greater part of this region rain is of rare occurrence, and not infrequently more than a year passes by without a drop falling on the parched surface On its eastern margin, however, in the neighbourhood of the Aravallı Hılls, and again in the Northern Punjab, rain is more frequent, occurring both in the south-west monsoon, and also at the opposite season in the cold weather. As far north as Sirsa and Multán, the average rainfall does not much exceed 7 inches

The alluvial plain of the Punjab passes into that of the Gangetic Gangetic valley without visible interruption Up or down this plain plain, at opposite seasons, sweep the monsoon winds, in a direction at right angles to that of their nominal course, and in this way the vapour brought by winds from the Bay of Bengal, is discharged as snow and rain on the peaks and hill-sides of the Western Himalayas Nearly the whole surface is under cultivation, and it ranks among the most productive as well as the most densely populated regions of the world The rainfall diminishes from 100 inches at the south-east corner of the Gangetic delta to less than 30 inches at Agra and Delhi, and there is an average difference of from 15 to 25 inches between the northern and southern borders of the plain

Eastward from the Bengal delta, two alluvial plains stretch Eastern up between the hills that connect the Himálayan system with Bengal that of the Burmese peninsula. The first is that of Assam and the Brahmaputra, long and narrow, bordered on the north by the Himalayas, on the south by the lower plateau of the Gáro, Khási, and Nagá Hills The second, or Sylhet and Cachar valley, is chiefly occupied by swamps and this, and separates the Gáro, Khásı, and Nagá Huls from those of Tipperah and the Lushai country The climate of both these plains is

damp and equable, and the rainfall is prolonged and generally heavy, especially on the southern slopes of the hills. A meteorological peculiarity of some interest has been noticed, more especially at the stations of Sibságar and Silchár, viz the great range of the diurnal variation of barometric pressure, particularly during the cool months of the year. It is the more striking, since at Rúrki, Luhore, and other stations near the foot of the Himálayas, this range is less than on the open plains

Central table land

Satpuia range

The highlands of the peninsula are cut off from the Himálayan ranges by the Indo-Gangetic plain divided into two unequal parts, by an almost continuous chain of hills, loosely known as the Sátpura range, running across the country from west-by-south to east-by-north, just south of the Tropic of Cancer This chain may be regarded as a single feature, forming the principal watershed of the peninsula The waters to the north of it drain chiefly into the Narbada (Nerbudda) and the Ganges, those to the south, into the Tapti, the Godavarı, the Mahanadı, and smaller streams meteorological point of view, this central chain of hills is of much importance Acting together with the two parallel valleys of the Narbada and Tapti, which drain the flanks of its western half, it gives a more decided easterly and westerly direction to the winds of this part of India and condenses a tolerably copious runfall during the south-west moonsoon

Malwa plateau Aravalli

range

Separated from this chain by the valley of the Narbada on the west, and that of the Son (Soane) on the east, the plateau of Malwa and Bighelkhand occupies the space intervening between these valleys and the Gangetic plain. On the western edge of the plateau are the ARAVALLI HIIIS, which run from near Ahmadahad up to the neighbourhood of Delhi, and include one hill, Mount Abu, over 5000 feet in height range exerts an important influence on the direction of the wind, and also on the rainfall At Ajmere, an old established meteorological station at the eastern foot of the range, the wind is predominantly south-west. Both here and at Mount Abú the south-west monsoon rains are a regular phenomenon. which can hardly be said of the region of scanty and uncertain rainfall which extends from the western foot of the range and merges in the Bikaner desert

Southern plateau The peninsula south of the Satpura range consists chiefly of the triangular plateau of the Deccan, terminating abruptly on the west in the Sahyadri range (Western Chats), and

shelving to the east (Eastern Ghats) This plateau is swept by the south-west monsoon after it has surmounted the western barrier of the Ghats The rainfall is consequently light at Poona and places similarly situated under the lee of the range, and but moderate over the more easterly parts of the plateau The rains, however, are prolonged to the north of the Sátpuras three or four weeks later than in Southern India, since they are brought there by the easterly winds which blow from the Bay of Bengal in October and the early part of November, when the re curved southerly wind ceases to blow up the Gangetic valley, and sets towards the Karnatik This was formerly thought to be the north-east monsoon, and is still so spoken of by some writers, but the rainy wind is really a diversion of the south-west monsoon

At the junction of the Eastern and Western Ghats rises the Anamalai bold triangular plateau of the Nilgiris, and to the south of Hills them come the Anamalais, Palnis (Pulneys), and Travancore These ranges are separated from the Nilgiris by a Hills broad depression or pass known as the Palghát gap, some 25 miles wide, the highest point of which is about 1500 feet above the sea. This gap affords a passage to the winds, which elsewhere are barred by the chain of the Western Gháts country to the east of the gap receives the rainfall of the south-west monsoon, and during the north-east monsoon, ships passing Beypur meet with a stronger wind from the land than is felt elsewhere on the Malabar coast to Captain Newbold, the Palghát gap 'affords an outlet to those furious storms from the eastward which sweep the Bay of Bengal, and, after traversing the peninsula, burst forth through it to the neighbouring sea?

In the coast-strip of low country which fringes the peninsula Southern below the Western Gháts, the rainfall is heavy, the climate warm coast and damp, the vegetation dense and tropical The steen slopes strips of the Gháts, where they have not been artificially cleared, are also thickly clothed with forest

Ceylon should, for meteorological purposes, be included Meteoro in this survey The country both south and west of the logy of hills which occupy the south centre of the island is very The runfall is here frequent and Rainy rugged down to the coast heavy, and the temperature being high and equable, the south west vegetation is dense and very luxuriant, such as is characteristic of Islands in tropical seas, and also of the coast of Travancore The plains on the east coast are drier, and both in climate Drier east and vegetation bear much resemblance to those of the Karnatik coast

The con

When the south-west monsoon is blowing in May and Tune. and discharging torrents of rain on the lorest-clad spurs and slopes that face to windward, the contrist presented by the eastward face of the same hills is tern striking and the two phases of climite are snarph democated. Newtra High (7000 feet) day after day, and even week after week her under a dense canopi of cloud, which shrouds all the higher peaks, and pours down in almost incessant rain traveller leave the station by the Badulla road, and cross over the main range at a distance of two or three miles from As he begins the descent towards Wilson's Newara Elwa bungalow, he emerges on a panorama of the grassy downs of the lower hills, bathed in dazzling sunshine, while on the ridge above he sees the cloud-masses ever rolling across from the west, and dissolving away in the drier air to leeward the east and west coasts of Cevlon are as strongly contrasted in climate as those of the southern extremity of the Indian peninsula

British Burma In British Burma, the western face of the Arakan Yoma hills, like that of the Indian Western Gháts, is exposed to the full force of the south west monsoon, and receives a very heavy rainfall. At Sandoway, this amounts to an annual mean of 212 inches. It diminishes to the northwards, but even at Chittagong, it amounts to 104½ inches annually.

Upper Lurma

The country around Ava, as well as the hill country of North Burma, is the seat of occasional severe earthquakes, one of which destroyed Ava city in 1839. The general meridianal direction of the ranges and valleys determines the direction of the prevailing surface winds, subject, however, to many local But it would appear, from Dr Anderson's observations of the movement of the upper clouds, that throughout the year there is, with but slight interruption, a steady upper current from the south west, such as has been already noticed over the Himalayas The rainfall in the lower part of the Irawadi valley, viz. the delta and the neighbouring part of the Province of Pegu, is very heavy, about 190 inches. the climate is warm and equable at all seasons. But higher up the valley, and especially north of the Pegu frontier, the country is drier, and is characterized by a less luxuriant vegetation, and by a retarded and more scanty rainfall of about 56 inches.

Observa tories OBSERVATORIES —Up to the year 1883, meteorological observatories had been established at 125 stations in India (including British Burma, the Andamans, and Nepál) These

observatories are situated at all elevations, from the highest, Leh (11,502 feet above mean sea level) and Chakrata (7051 feet), to Sagar Island, 25 feet, and Negapatam, only 15 feet above mean sea-level

OBSERVATIONS —The observations taken at Indian meteoro-Observalogical stations record — (1) temperature of solar and of tions nocturnal radiation, (2) air temperature, (3) atmospheric pressure, (4) direction and velocity of the wind, (5) humidity, (6) cloud proportion, and (7) rainfall For full information on each of these subjects, the reader is referred to the valuable and deeply interesting reports of Mr F Blanford and Mr Eliot, printed at the Government Press, Calcutta, and available to all inquirers at the India Office, London

Solar Radiation —Although, theoretically, differences in Solar the height above ground of the registering thermometer produce radiation little difference in the amount of radiation from the ground, yet the nature of the surface forms an important feature, the action of which differs very considerably in different parts of India, and interferes with an exact comparison of results obtained from different stations. Thus, the radiation from the parched, heated, and bare surface of the soil in the North-Western Provinces in May, must be considerably greater than from the moist grass-covered surface of the soil at the coast stations of Bengal and Western India in the same month

The following figures are obtained from Bengal stations Retuins where the instruments are believed to be accurate and comparable. The yearly average maximum equilibrium temperatures of compared sun thermometers in vacuo, varied in these stations from 1215° F at Darjiling (much the lowest average) and 1313° at Goalpárá (the next lowest), to 1456° at Bardwán and 1474° at Cuttack. The excess of the above over the corresponding maximum shade temperatures was—at Darjiling, 591°, at Goálpara, 484°, at Bardwan, 57° and at Cuttack, 558°

TEMPERATURE OF THE AIR —From the average annual mean Temperatures of 117 stations (derived from the means of three ture of the or more years), the following figures are taken. In the two following stations in this list, the average mean yearly temperature was over 82° F. —Trichinopoli, 82 1°, Vizagapatam, yearly temperature was over 82° F. —Trichinopoli, 82 1°, Vizagapatam, yearly temperature was over 82° F. —Trichinopoli, 82 1°, Vizagapatam, yearly temperature was over 82° F. —Trichinopoli, 82 1°, Vizagapatam, yearly temperatures are returned by Madras Presidency. The tures next highest means are returned by Madras, 82°, Madura (also in Madras), 81°, Negapatam, 81°, Masulipatam, 81°, Karnúl, 81°, Sironcha, 81°, Cuttack, 80°, Bellary and Salem,

Hill stations

80 4°, Port Blair, 80 3°, Bikaner, 80°, False Point, 79 3°, Goa, 79 9°, Cochin, 79 6°, Sagar Island, 78 6°, Deesa, 79 9°, and Calcutta, 77 8° The mean annual temperature of Bombay is 79 7° The lowest means are obtained at the hill stations of Darjiling, 51 8°, Simla, 55°, Murree, 56 1°, and Chakrata, 56 3° Between these and the next coolest stations is a gap, Masuri (Mussoorie) following with 59 2°, Ráníkhet with 60 2°, Pachmarhi with 68 7°, and Ráwal Pindi with a yearly mean of 69 3° The highest mean monthly temperatures given are — 94 7° at Jhánsi, in May, 94 4° at Múltan, in June, 93 7° at Lahore, Delhi, and Agra, in June The lowest monthly means are returned by the four coldest hill stations mentioned above. the figures being -Murree-January 39°, February 394° Sımla — January 40 4°, February 41 4°, Chakrata — January 42 3°, February 43 4°, Darnling — January 39 4°, February 41 2° The mean temperature at Leh in January is 17 1°, and in December 23 1° F

Atmo spheric

pressure

Monthly tempera-

tures

ATMOSPHERIC PRESSURE—The Meteorological Report for 1883 contains a table showing the annual mean pressure at 111 stations, corrected (except in the case of Madras) to the Calcutta standard, which reads ooil inch higher than that of Kew From that table the following figures are obtained. The mean yearly pressure in inches at the highest stations is—22 944 at Darjiling, 23 224 at Chakrata, 23 275 at Simla, 24 059 at Ranikhet, 26 392 at Pachmarhi, and 26 924 at Bangalore The greatest annual mean pressures returned are—29 889 at Cochin, 29 845 at Negapatam, 29 840 at Madras, and 29 821 at Bombay These pressures are not reduced to the level of the sea.

Wind

WIND —The general directions of the wind in different parts of the peninsula have already been noticed in the introductory portion of this chapter describing the meteorological geography of the country

Humidity

HUMIDITY—The humidity figures given in the Report for 1877 are, according to Mr Eliot, the Officiating Meteorological Reporter to the Government of India, not generally intercomparable, as the mean relative humidity is deduced from a varying number of daily observations

Cloud proportion CLOUD PROPORTION — I he Report for 1883 gives the averages of estimated cloud proportion for 113 stations in India, an overcast sky being represented by 10 and a clear sky by 0 Some of the extreme figures follow The average annual proportion of clouded sky is represented at Sibságar by 7 19, at Merkára by 6 68, at Darjíling by 6 44, at Irichinopoli by

6 04, at Combatore by 5 19, at Salem by 4 66 The lowest proportions recorded are — for Jhánsi, 1 20, Hyderábad (Sind), 1 69, Múltan, 1 66, Dera Ismáil Khan, 2 04, Ságar (Saugor), in the Central Provinces, 2 43

RAINFALL —The average annual rainfall at 435 stations is Rainfall recorded in the Meteorological Report for 1883, from which the following figures were derived

In the Punjab, the highest average fall (124 91 inches) is at The Dharmsála, which is situated on the face of the hills, and Punjab exposed to the full force of the monsoon, the next highest recorded is little more than half that amount, or 71 24 inches, at Simla The lowest average falls in the Punjab are —5 88 inches at Muzaffargarh, 7 07 at Multan, 7 03 at Dera Ghází Khan, and 8 46 at Dera Ismail Khan All these stations are protected by the Sulaimán range from the monsoon

In Rájputána and Central India the minimum is 1207 Rajputana inches at Pachbadra, and the maximum, 6321, at Mount Abu, and Central India the highest point in this part of India

In the North-Western Provinces the heaviest rainfalls are North at Masuri (94 72 inches), Naini Tal (91 17), and Dehra (74 91), Western all of which lie high, the minimum average fall is 25 28 at Muttra, the next lowest figures being 26 of at Aligarh, 25 66 at Agra, and 25 70 at Bulandshahr—all stations on the plains

In Oudh, the maximum rainfall is at Bahraich, 43 48 inches, Oudh and the minimum at Rai Bareli, 32 18 inches

The following stations of Bengal have an average rainfall of Bengal more than 100 inches —Baxa, 220 91, Jalpaiguri, 129 21, Mongpu, 128 43, Dárjiling, 120 85, and Kuch Behar, 130 89—1ll at the base of the hills, Noakhalí, 111 75, Demngiri, 112 97, Cox's Bizzar, 141 60, and Chittigong, 104 58, all near the north east corner of the Bay of Bengal The lowest averages are returned by Keunjhar, 32 61 inches, Buxar, 39 04, Chhapra, 39 15, and Gaya, 40 29 The average rainfall throughout Bengal is 67 inches

Assam possesses in Cherra Poonjee (Chara Punji) the Assam station with the largest rainfall in the world. Former returns gave the fall at 368 inches, later and fuller returns at 481 80 inches. A total fall of 805 inches was reported in 1861, of which 366 were assigned to the single month of July. In 1850, Dr. Hooker registered 30 inches in twenty-four hours, and returned the fall from June to November of that year at 530 inches. In the four days 9th to 12th September 1877, 56 19 inches were registered. The cause of this extraordinary rainfall is

noticed in the chapter on Physical Geography The following stations in Assam have also a very high average rainfall — Silchár, 11885, Sylhet, 15612, Dibrugarh, 11353, and Turá, 123 80 The lowest recorded averages in Assam are at Samaguting (52 58 inches) and Gauhati (69 26 inches), both on the northern side of the hills separating Cachar from Assam

Central

In the Central Provinces, the highest average falls are at Provinces Pachmarhi, 77 85 inches, and Balaghát, 65 92, lowest averages, Khandwa, 33 29 inches, and Arvi, 35 09 inches

Bombay

In Bombay, two stations on the Ghats are recorded as having an average rainfull of over 250 inches, viz -Malcolmpet (Mahableshwar), 258 49, and Baura (Fort), 255 28 Next in order come Matheran, with 245 24 inches, Lonauli, with 165 13, Honawar, 138 08, and Igatpuri, Karwar, Vingúrla, and Ratnagiri, with 124 19, 116 03, 110 89, and 104 55 inches respectively The lowest average rainfalls recorded in Bombay are -1882 inches at Mandargi, 2097 at Dhulia, and 2141 The average runfall in Bombay is 67 inches

Sind

In Sind, the average rainfall is very low, varying from 16 17 inches at Nagar, and 11 og at Umárkot, to 465 at Shikárpur, and 4 33 at Jacobabad

Madras

In Madras, the highest local averages recorded are -132 87 inches at Mangalore, 129 68 at Cannanore, 128 21 at Merkara, 125 66 at Tellicherri, 115 04 at Calicut, and 115 02 at Cochin—all on the west coast I he lightest falls recorded are -at Bellary, 17 64 Tuticorin (sheltered by the Ghats), 19 44, Guti (Gooty), 21 70, and Coimbatore, 21 34 All these stations he low The average fall at the stations on the east coast is about 41 inches A fair average rainfall for Madras Presidency is 44 inches

British. Burma

The rainfall along the coast of British Burma is heavy, as might be expected, the following averages being recorded -Sandoway, 212 03 inches, lavoy, 197 02, Akyab, 197 61, Maulmain, 189 37, Kyauk-pyu, 174 79 The smallest rainfall is at Thayet-myo (47 37) and Prome (53 00), sheltered by the Yoma range

Port Blair

The rainfall at Port Blair and Nancowry is also heavy, the averages being returned as 118 38 and 108 91 inches respectively

Sun spot cycles

SUN-SPOT CYCLES -These alleged cycles have formed the subject of several separate papers, and the results were popularly summed up in a joint article by Mr Norman

Lockyer and the present author in the Nineteenth Century for November 1877 It will therefore suffice here to state the views of the Indian Meteorological Department on the intricate questions involved The following are the inferences which the meteorology of India appears to suggest, if not to establish There is a tendency at the minimum sun-spot periods to prolonged excessive pressure over India, and at the maximum sun spot periods to an unusual development of the winter rains, and to the occurrence of abnormally heavy snowfall over the Himálayan region (to a greater extent probably in the Western than the Eastern Himálayas) appears also to be usually followed by a weak south west monsoon The characteristics of a weak monsoon are, great irregularity in the distribution of the rainfall over the whole of India, and the occurrence of heavy local rainfalls, which tend, by a law of rainfall and of air-motion, to recur over the same limited areas The irregularity of rainfall distribution is often shown by the persistence of dry land winds and the prolonged absence of rain over considerable areas These areas of drought and famine are partly marked off by nature, depending to a certain extent on the geographical features and position of the district. Thus, the rains are more likely to fall below the amount necessary for cultivation in the dry region of the Deccan or in Upper India, than over the Malabar coast area or the Province of Bengal

# CHAPTER XXIV

### ZOOLOGY AND BOTANY OF INDIA

Lion

Mammals WIID ANIMALS —First among the wild animals of India must be mentioned the lion (Felis leo), which is recorded to have been not uncommon within historical times in Hindustán Proper and the Punjab The lion is now confined to the  $G\nu$ , or locky hill desert and forest of Kathiawar A peculiar variety is there found, marked by the almost total absence of a mane, but whether this variety deserves to be classed as a distinct species, naturalists have not yet determined The lion has now almost entirely disappeared, and the official Gazetteer of Kathiáwár states that there are now (1884) probably not more that ten or a dozen hons and honesses left in the whole Gir forest tract They are strictly preserved. The former extent of the lion's range, or the degree to which its presence impressed the imagination, may be inferred from the common

personal names, 51nh or Singh, Sher, and Haidar, which all

Sher, however, is also applied to the tiger

Light

The characteristic beast of prey in India is the tiger (Felis tigris), which is found in every part of the country from the slopes of the Himalayas to the Sundarba 1 swamps Favrer, the highest living authority on this subject, believes that 12 feet is the maximum length of the tiger, when measured from nose to tip of tail immediately after death The advance of cultivation, even more than the incessant attacks of sportsmen, has gradually caused the tiger to become a rare animal in large tracts of country, but it is scarcely probable that he ever will be exterminated from India The malarious tarat fringing the Himalayas, the uninhabitable swamps of the Cangetic delta, and the wide jungles of the central plateau, are at present the chief home of the tiger. His favourite food appears to be deer, antelope, and wild hog these abound, he does not attack domestic cattle the natives of certain Districts consider the tiger as in some sort their protector, for he saves their crops from destruction by the wild animals on which he feeds. But when once he develops a taste for human blood, then the slaughter which he works becomes truly formidable

The confirmed man eater, generally an old beast, disabled Man from overtaking his usual prey, seems to accumulate his tale of  $\frac{\text{eating}}{\Gamma_{\text{igel}}}$ victims in sheer cruelty rather than for food. A single tiger is known to have killed 108 people in three years Another killed an average of about 80 persons per annum. A third caused 13 villages to be abandoned, and 250 square miles of land to be thrown out of cultivation A fourth, so lately as 1869, killed 127 people, and stopped a public road for many weeks, until the opportune arrival of an English sportsman, who killed him Such cases are, of course, exceptional, and generally refer to a past period, but they explain the superstitious awe with which the tiger is regarded by the natives

The favourite mode of shooting the tiger is from the back of elephants, or from elevated platforms (machans) of boughs in the jungle In Central India and Bombay, tigers are shot on foot In Assam, they are sometimes speared from boats, and in the Himalayas they are said to be ensuared by bird-lime Rewards are given by Government to native shikaris for the heads of tigers varying in time and place according to the In 1877, 819 persons and 16,137 cattle were reported to have been killed by tigers On the other side of the account 1579 tigers were destroyed by native hunters, and £3777 paid in rewards, besides the slaughter by English sportsmen 1882, no fewer than 895 persons and 16,517 cattle were returned as killed by tigers The sum of £4800 was paid during the year to native shikaris for the destruction of 1726 tigers

The leopard or panther (Felis pardus) is far more common Leopard than the tiger in all parts of India, and at least equally de structive to life The greatest length of the Indian leopard is about 7 feet 6 inches. A black variety, as beautiful as it is rare, is sometimes found in the extreme south of the Indian peninsula, and also in Java The cheetah or hunting leopard Cheetah (Felis jubata) must be carefully distinguished from the leopard proper This animal appears to be a native only of the Deccan, where it is trained for hunting the antelope respects it approaches the dog more nearly than the cat tribe Its limbs are long, its hair rough, and its claws blunt and only partially retractile The speed with which it bounds upon its prey, when loosed from the cart, exceeds the swiftness of any other wild mammal If it misses its first attack, it scarcely eyer attempts to follow, but returns to its master. Among

Other species

other species of the family Felidæ found in India may be mentioned the ounce or snow leopard (F unica), the clouded tiger (F macroscelis), the marbled tiger cat (F marinorata), the jungle cat (F chaus), and the common viverrine cat (F viverrina)

W olf

Wolves (Canis lupus) abound throughout the open country, but are rare in the wooded districts Their favourite prey is sheep, but they are also said to run down antelopes and hares, or rather catch them by lying in ambush. Instances of their attacking man are not uncommon, and in 1882, 278 persons, principally children, besides 8661 cattle, were reported to have been killed by wolves In 1827, upwards of 30 children were carried off by wolves in a single pargana or fiscal division, and the story of Romulus and Remus has had its counterpart in India within recent times The Indian wolf has a dingy reddish white fur, some of the hairs being tipped with black By some naturalists it is regarded as a distinct species, under the name of Canis pallipes Three distinct varieties, the white, the red, and the black wolf, are found in the Tibetan Himalayas

Fox

Tackal

The Indian fox (Vulpes bengalensis) is comparatively rare, but the jackal (Canis aureus) abounds everywhere, making night hideous by its never to be-forgotten yells. The jackal, and not the fox, is usually the animal hunted by the packs of hounds kept by Europeans.

D vg

The wild dog or dhole is found in very many of the wilder jungles of India, including Assam and British Burma Its characteristic is that it hunts in packs, sometimes containing 30 dogs, and does not give tongue. When once a pack of wild dogs has put up any animal, whether dccr or tiger, that animal's doom is sealed They do not leave it for days, and finally bring it to bay, or run it down exhausted. These wild dogs have sometimes been half domesticated, and trained to hunt for the use of man A peculiar variety of wild dog exists in the Karen Hills of Burma, thus described from a specimen It was black and white, as hairy as a Skyein confinement terrier, and as large as a medium sized spaniel. It had an invariable habit of digging a hole in the ground, into which it crawled backwards, remaining there all day with only its nose and ferrety eyes visible Among other dogs of India are the pariah, which is merely a mongrel, run wild and half starved, the poligar dog, an immense creature peculiar to the south. the greyhound, used for coursing, and the mastiff of Tibet and Bhután

The striped hyæna (Hyæna striata) is common, being found Hyæna wherever the wolf is absent Like the wolf, it is very destructive both to the flocks and to children

Of bears, the common black or sloth bear (Ursus labiatus) Bear is common throughout India wherever rocky hills and forests It is distinguished by a white horse shoe mark on its breast Its food consists of ants, honey, and fruit When disturbed it will attack man, and it is a dangerous antagonist, for it always strikes at the face The Himalayan or Tibetan sunbear (Ursus tibetanus) is found along the north, from the Punjab to Assam During the summer it remains high up in the mountains, near the limit of snow, but in the winter it descends to 5000 feet, and even lower Its congener, the Malayan sun-bear (Helarctos malayanus), is found in British Burma, where also there is a smaller species (Helarctos euryspilus), and a very large animal reported to be as big as the American grizzly There were 114 persons returned as killed by bears in 1882

The elephant (Elephas indicus) is found in many parts of The Fle India, though not in the north-west Contrary to what might phant be anticipated from its size and from the habits of its African cousin, the Indian elephant is now, at any rate, an inhabitant, not of the plains, but of the hills, and even on the hills it is usually found among the higher ridges and plateaux, and not in the valleys From the peninsula of India the elephant has been gradually exterminated, being only found now in the primæval forests of Coorg, Mysore, and Travancore, and in the Tributary States of Orissa It still exists in considerable numbers along the tarái or submontane fringe of the Himalayas The main source of supply at the present time is the confused mass of hills which forms the north east boundary of British India, from Assam to Burma Two varieties are there distinguished, the gunda or tusker, and the makna or hine, which has no tusks

The reports of the height of the elephant, like those of its intelligence, seem to be exaggerated. The maximum is probably 12 feet If hunted, the elephant must be attacked on foot, and the sport is therefore dangerous, especially as the animal has but few parts vulnerable to a bullet The regular mode of catching elephants is by means of a kheda or gigantic Llephant stockade, into which a wild herd is driven, then starved into catching submission, and tamed by animals already domesticated The practice of capturing them in pitfalls is discouraged as cruel and wasteful. Elephants now form a Government monopoly

throughout India. The shooting of them is prohibited, except when they become dangerous to man or destructive to the crops, and the right of capturing them is only leased out upon conditions

Elephant Preserva tion Act

A special law, under the title of 'The Elephants Preservation Act' (No VI of 1879), regulates this licensing Whoever kills, captures, or injures an elephant, or attempts to do so, without a licence, is punishable by a fine of 500 rupees for the first offence, and by a similar fine, together with six months' imprisonment, for a second offence vear 1877-78, a total of 264 elephants were captured in the Province of Assim vielding to Government a revenue of £3600 In 1882-83, 475 elephants were captured in Assam, yielding a revenue to Government of £8573In the season of 1873-74 no less than 53 elephants were captured at one time by Mr Sanderson, formerly the superintendent of the Kheda Department in Mysore, who has made a special study of the Indian elephant as Sir S Baker has of the same animal Although the supply is decreasing, elephants continue to be in great demand. Their chief use is in the timber trade and for Government transport They are also bought up by native chiefs at high prices for ostentation persons were reported as killed by elephants in 1882

The Rhin

Of the rhinoceros, four distinct varieties are enumerated, two with a single, and two with a double horn. I he most familiar is the Rhinoceros unicornis, commonly found in the Brahmaputra valley and its wide swamps. It has but one horn, and is covered with massive folds of naked skin It sometimes attains a height of 6 feet, its horn, which is much prized by the natives for medicinal purposes, soldom exceeds 14 inches It frequents swampy, shady spots, and wallows in mud like a pig. The traditional antipathy of the rhinoceros to the elephant seems to be mythical. The Javan rhinoceros (R sondaicus) is found in the Sundarbans It also has but one horn, and mainly differs from the foregoing in being smaller, and having less prominent 'shields'. The Sumatran rhinoceros (R sumatrensis) is found from Chittagong southwards through Burma It has two horns and a bristly coat The hairy-cared rhinoceros (R lasiotis) is known from a specimen captured at Chittagong, and sent to the Zoological Gardens, London Iwo are at Calcutta

The wild Hog

The wild hog (Sus scrofa, var indica) is well known as affording the most exciting sport in the world—'pig-sticking' It frequents cultivated localities, and is the most mischievous

enemy which the husbandman has to guard against, doing more damage than elephants, tigers, leopards, deer, and antelope, all put together A rare animal, called the pigmy hog (Porculia salvania), exists in the *tarai* of Nepál and Sikkim, and has been shot in Assam Its height is only 10 inches, and its weight does not exceed 12 lbs

The wild ass (Equus onager) is confined to the sandy The wild deserts of Sind and Kachchh (Cutch), where, from its speed Ass and timidity, it is almost unapproachable

Many wild species of the sheep and goat tribe are to be Sheep and found in the Himálayan ranges. The Ovis ammon and O Goats poli are Tibetan rather than Indian species. The urial and the shapu are kindred species of wild sheep, found respectively in Ladakh and the Suláiman range. The former comes down to 2000 feet above the sea, the latter is never seen at altitudes lower than 12,000 feet. The barhal, or blue wild sheep, and the markhor and tahr (both wild goats) also inhabit the Himalayas. A variety of the ibex is also found there, as well as in the highest ranges of Southern India. The sarau (Nemorhædus rubidus), allied to the chamois, has a wide range in the mountains of the north, from the Himálayas to Assam and Burma.

The antelope tribe is represented by comparatively few Antelopes species, as compared with the great number found in Africa The antelope proper (Antilope cervicapra), the 'black buck' of sportsmen, is very generally distributed. Its special habitat is salt plains, as on the coast-line of Gujarát (Guzerat) and Orissa, where herds of 50 does may be seen, accompanied by a single buck. The doe is of a light fawn colour, and has no horns. The colour of the buck is a deep brown-black above, sharply marked off from the white of the belly. His spiral horns, twisted for three or four or more turns like a corkscrew, often reach the length of 30 inches. The flesh is dry and unsavoury, but is permitted meat for Hindus, even of the Brahman caste. The four-horned antelope (Tetraceros quadricornis) and the gazelle (Gizella bennettii) are also found in India. The chiru (Pantholops hodgsoni) is confined to the Himálayan plateaux

The nilgat or blue cow (Portax pictus) is also widely dis-Nilgat tributed, but specially abounds in Hindustan Proper and Gujarat As with the antelope, the male alone has the dark blue colour. The nilgat is held peculiarly sacred by Hindus, from its fancied kinship to the cow, and on this account its destructive inroads upon the crops are tolerated.

The king of the deer tribe is the sámbhar or gerau (Cervus Deer vol. vi

aristotelis), erroneously called 'elk' by sportsmen It is found on the forest-clad hills in all parts of the country. It is of a deep-brown colour, with hair on its neck almost like a mane, and it stands nearly 5 feet high, with spreading antiers nearly 3 feet in length. Next in size is the swamp deer or bara-singha, signifying 'twelve points' (Cervus duvaucelli), which is common in Lower Bengal and Assam. The chital or spotted deer (Cervus axis) is generally idmitted to be the most beautiful inhabitant of the Indian jungles. Other species include the hog deer (Cervus porcinus), the barking deer or muntjac (Cervulus muntijac), and the so-called mouse deer (Fragulus meminna). The musk deer (Moschus moschiferus) is confined to Tibet.

The Bison

The ox tribe is represented in India by some of its noblest species The gaur (Bos gaurus), the 'bison' of sportsmen, is found in all the hill jungles of the country, in the Western Ghats, in Central India, in Assam, and in British Burma This animal sometimes attains the height of 20 hands (close on 7 feet), measuring from the hump above the shoulder short curved horns and skull are coormously massive Its colour is Jark chestnut, or coffee-brown From the difficult nature of its habitat, and from the icrocity with which it charges an enemy, the pursuit of the bison is no less dangerous and no less exciting than that of the tiger or the elephant Akin to the gaur, though not identical, are the gazal or mithun (Bos frontalis), confined to the hills of the north-east frontier, where it is domesticated for sacrificial purposes by the ab original tribes, and the tsine or bantin, (Bos sondaicus), found in Burma.

The Buttalo The wild buffalo (Bubalus arm) differs from the tame buffalo only in being larger and more fierce. The finest specimens come from Assam and Burma. The horns of the bull are thicker than those of the cow, but the horns of the cow are larger. A head has been known to measure 13 feet 6 inches in circumference, and 6 feet 6 inches between the tips. The greatest height is 6 feet. The colour is a slaty black, the hide is immensely thick, with scanty hairs. Alone perhaps of all wild animals in India, the buffalo will charge unprovoked Even tame buffaloes seem to have an inveterate dislike to Furopeans.

Ra ribe

The rat and mouse family is only too numerous. Conspicuous in it is the loathsome bandicoot (Mus bandicota), which sometimes measures 2 feet in length, including its tail, and weighs 3 lbs. It burrows under houses, and is very

destructive to plants, fruit, and even poultry More interesting is the tree rat (Mus arboreus), a native of Bengal, about 7 inches long, which makes its nest in cocoa-nut palms and bamboos The voles or field mice (genus Arvicola) occasionally multiply so exceedingly as to seriously diminish the outturn of the local harvest, and to require special measures for their destruction

The ornithology of India, although it is not considered so Birds rich in specimens of gorgeous and variegated plumage as that of other tropical regions, contains many splendid and curious Some are clothed in nature's gay attire, others distinguished by strength, size, and fierceness The parrot tribe is the most remarkable for beauty So various are the species, that no attempt is made here even to enumerate them, but the reader is referred for details to the scientific works on the subject 1

Among birds of prey four vultures are found, including the Birds of common scavengers (Gyps indicus and G bengalensis) cagles comprise many species, but none to surpass the golden eagle of Europe Of falcons, there are the peregrine (Falco peregrinus), the shain (Falco peregrinator), and the lagar (Falco jugger), which are all trained by the natives for hawking, of hawks, the shikara (Astur badius), the sparrow hawk (Accipiter nisus), and the crested goshawk (Astur trivirgatus) Kingfishers of various kinds, and herons are sought for their plumage No bird is more popular with natives than the maina (Acridotheres tristis), a member of the starling family, which lives contentedly in a cage, and can be taught to pronounce words, especially the name of the god Krishna

Waterfowl are especially numerous Of game-birds, the Game floriken (Sypheotides auritus) is valued as much for its rarity as birds for the delicacy of its flesh Snipe (Gallingo scolopacina, etc.) abound at certain seasons, in such numbers that one gun has been known to make a bag of 100 brace in a day partridges, quail, plover, duck, teal, sheldrake, widgeon-all of many varieties—complete the list of small game The red jungle fowl (Gallus ferrugineus), supposed to be the ancestor of our own poultry, is not good enting, and the same may be said of the peacock (Pavo cristatus), except when young The pheasant does not occur in India Proper, but a white variety is found in Burma, and several beautiful species (conspicuously the manaul) abound in the Himalayas

1 Especially those of Jerdon, Gould, Hume, and Marshall

Reptiles

The cobia

The serpent tribe in India is numerous, they swarm in the gardens, and intrude into the dwellings of the inhabitants, especially during the rainy season. Most are comparatively harmless, but the bite of others is speedily fatal 1 The cobra di capello-the name given to it by the Portuguese, from the appearance of a hood which it produces by the expanded skin about the neck—is the most dreaded (Naja tripudians) seldom exceeds 3 or 4 feet in length, and is about an inch and a quarter thick, with a small head, covered on the forepart with large smooth scales, it is of a pale brown colour above, and the belly is of a bluish white tinged with pale brown or yellow The Russellian snake (Daboia Russellii). about 4 feet in length is of a pile yellowish brown, beautifully variegated with large oval spots of deep brown, with a white Its bite is extremely fatal Itinerant showmen carry about these serpents, and cause them to assume a dancing motion for the amusement of the spectators. They give out that they render snakes harmless by the use of charms or music—in reality, by extracting the venomous fangs judging from the frequent accidents, they sometimes seem to dispense with this precaution. All the salt-water snakes in India are poisonous, while the fresh-water forms are innocuous

Deaths from snake bre Sir Joseph Fayrer has demonstrated that none of the reputed antidotes will cure the bite of the cobra, if the snake is full-grown and if its poison fang is full and be not interfered with by clothing. The most hopeful remedy in all cases of snake-bite is the injection of ammonia. The loss of life from this cause in India is painful to contemplate. But the extermination of snakes is attended with great difficulty, from the great number of the species, the character of the country, the rapid undergrowth of jungle, and the scruples of the people. Something, however, is being effected by the offer of rewards. In 1877, a total of 16,777 persons are reported to have been killed by snakes, as compared with only \$19 by tigers. In the same year, rewards to the amount of £811 were given for the destruction of 127,295 snakes. In 1882, a total of 19,519 persons are reported to have been

Statistics, 1877,

an 1 1882

£811 were given for the destruction of 127,295 snakes In 1882, a total of 19,519 persons are reported to have been killed by snakes, as compared with 2606 by tigers, leopards, and all other wild beasts A sum of £1487 was paid in 1882 for the destruction of 322,421 venomous reptiles

Crocodile

The other reptiles include two varieties of crocodile (C

1 Sir Joseph Layrer's Thanatophidia is the standard work on Indian snakes. Vincent Richards' Landmarks of Snake Poison Liberature is an excellent compendium.

porosus and C biporcatus) and the garial (Gavialis gangeticus) Scorpions also abound

All the waters of India—the sea, the rivers, and the tanks— Fishes swarm with a great variety of fishes, which are caught in every conceivable way, and furnish a considerable proportion of the food of the poorer classes. They are eaten fresh, or as nearly fresh as may be, for the art of curing them is not generally practised, owing to the exigencies of the salt monopoly. In Burma, the favourite relish of nga-pi is prepared from fish. At Goalandá, at the junction of the Bráhmaputra with the Ganges, and along the Madras coast, establishments have been established for salting fish in bond. The indiscriminate slaughter of fry, and the obstacles opposed by irrigation dams to breeding fish, are said to be causing a sensible diminution in the supply in certain rivers. Measures of conservancy have been suggested, but their execution is attended with great difficulty, owing to the habits and the necessities of the poorer population.

Among Indian fishes, the Cyprinidæ or carp family and the Siluridæ or cat fishes are best represented. From the angler s point of view, by far the finest fish is the mahsir, found in all hill streams, whether in Assam, the Punjab, or the south One has been caught weighing 60 lbs, which gave play for more than seven hours Though called the salmon of India, the mahsir is really a species of barbel. One of the richest and most delicious of Indian fishes is the hi/sá, which tastes and looks like a sort of fat white salmon. It is caught in immense quantities in the rivers of the Bengal delta, and forms a staple article of food in Calcutta The Bombay and Madras markets are still better supplied by a variety of delicate fishes But the enhanced price of this important article of native diet throughout the country, the decreased supply, and the ever-increasing fineness of the meshes of the nets employed in catching the fry, are matters of grave concern alike to the Government and to the poorer classes of the population

In this connection may be mentioned the susu or Gangetic Dolphin dolphin (Platanista gangetica), a mammal often erroneously called a porpoise Both the structure and habits of this animal are very singular. It measures from 6 to 12 feet in

<sup>&</sup>lt;sup>1</sup> The latest standard works on Indian fishes and their economic repects are the Reports and official volume by Dr Francis Day, late Inspector-General of Fisheries to the Government of India, available to all inquirer, at the India Office, London

length, and in colour is sooty-black. Its head is globular, with a long, narrow, spoon shaped snout. Its eyes are rudimentary, like those of the mole, and its ear-orifices are no bigger than pin-holes. Its dentition, also, is altogether abnormal. It frequents the Ganges and Indus from their mouths right up to their tributaries within the hills. A specimen has been taken at lenst 1000 miles above Calcutta Ordinarily its movements are slow, for it wallows in the muddy bed of the river, and only at intervals comes to the surface to blow. The susu belongs to the order Cetacea, and inquiries have recently been directed to the point whether its blubber might not be utilized in commerce.

Insect-

The insect tribes in India may be truly said to be innumerable, nor has anything like a complete classification been given of them in the most scientific treatises. The heat and the rains give incredible activity to noxious or troublesome insects, and to others of a more showy class, whose large wings surpass in brilliancy the most splendid colours of art Stinging musquitoes are innumerable, with moths and ants of the most destructive habits, and other insects equally noxious and disagreeable. Amongst those which are useful are the bee, the silkworm, and the insect that produces lac Clouds of locusts occasionally appear, which leave no trace of green behind them, and give the country over which they pass the appearance of a desert. Dr. Buchanan saw a mass of these insects in his journey from Madras to the Mysore territory, about 3 miles in length, like a long narrow red cloud near the horizon, and making a noise somewhat resembling that of a cataract Their size was about that of a man's finger. and their colour reddish. They are swept north by the wind till they strike upon the outer ranges of the Himáliyas

I ocu t-

Indian flora FIGRA 1—Unlike other large geographical areas, India is remarkable for having no distinctive botanical features peculiar to itself. It differs conspicuously in this respect

<sup>1</sup> For a general sketch of the flora of India, recourse must still be had to the introductory essay to the Flora India, published by Hooker & Thomson in 1855. The Ilora of british India, the preparation of which is in progress at Kew, will comprise descriptions of all the species known to science up to the date of publication. It will form a great national work on the botany of India. For the following paragraphs on the flora, written by Mr. W. T. T. Dyer of Kew, the author is indebted to the courtesy of Messrs. A. & C. black, publishers of the Encyclopædia Britannica.

from such countries as Australia or South Africa. Its vegetation is in point of fact of a composite character, and is constituted by the meeting and blending of the various floras adjoining,—of those of Persia and the south-eastern Mediterranean area to the north-west, of Siberia to the north, of China to the east, and of Malaya to the south-east does not admit of a minute discussion of the local features peculiar to separate districts, but regarded broadly, four tolerably distinct types present themselves namely, the Himálayan, the North-Western, the Assamese or Malayan, and the Western India type

The upper levels of the Himálayas slope northwards Upper gradually to the Tibetan uplands, over which the Siberian Hima layas temperate vegetation ranges This is part of the great temperate flora which, with locally individualized species but often with identical genera, extends over the whole of the temperate zone of the northern hemisphere In the Western Himalayas, this upland flora is marked by a strong admixture of European species, such as the columbine (Aquilegia) and hawthorn (Cratægus oxyacantha) These disappear rapidly eastward, and are scarcely found beyond Kumaun

The base of the Himalayis is occupied by a narrow belt Lower forming an extreme north-western extension of the Malayan Hima type described below Above that, there is a rich temperate flora which in the eastern chain may be regarded as forming an extension of that of Northern China, gradually assuming westwards more and more of a European type Magnolia, Aucuba, Abelia, and Skimmia may be mentioned as examples of Chinese genera found in the Eastern Himálayas, and the tea-tree grows wild in Assam The same coniferous trees are common to both parts of the range Pinus longifolia extends to the Hindu-Kush, P excelsa is found universally except in Sikkim, and has its European analogue in P Peuce, found in Abies Smithiana extends into the mountains of Greece Afghánistán, Abies Webbiana forms dense forests at altitudes of 8000 to 12,000 feet, and ranges from Bhután to Kashmir, several jumpers and the common yew (Taxus baccata) also The deodar (Cedrus Deodari), which is indigenous to the mountains of Afghanistan and the north-west Himálayas, is nearly allied to the Atlantic cedar and to the cedar of Lebanon, a variety of which has recently been found in Cyprus Another instance of the connection of the Western Himálayan flora with that of Europe is the holm oak (Quercus Ilex), so characteristic of the Mediterranean region

Northwest

The north-western area is best marked in Sind and the Punjab, where the climate is very dry (rainfall under 15 inches), and where the soil, though fertile, is wholly dependent on irrigation for its cultivation The low-scattered jungle contains such characteristic species as Capparis aphylla, Acacia arabica (babul), Populus euphratica (the 'willows' of Ps CXXVII. 2), Salvadora persica (erroneously identified by Royle with the mustard of Matt xiii 31), tamarisk, Zizyphus, Lotus, The dry flora extends somewhat in a south-east direction, and then blends insensibly with that of the western peninsula, some species representing it are found in the upper Gangetic plain, and a few are widely distributed in dry parts of the country

\sam and **Valayan** penmsula

This area is described by Sir Joseph Hooker as comprising 'the flora of the perennially humid regions of India, as of the whole Malayan peninsula, the upper Assam valley, the Khası mountains, the forests of the base of the Himálayas from the Brahmaputra to Nepal, of the Malabar coast, and of Ceylon'

Western India

The Western India type is difficult to characterize, and is intermediate between the two just preceding. It occupies a comparatively dry area, with a rainfall under 75 inches respect to positive affinities, Sir Joseph Hooker has pointed out some relations with the flora of tropical Africa as evidenced by the prevalence of such genera as Grewia and Impatiens, and the absence, common to both countries, of oaks and pines which abound in the Malayan archipelago The annual vegetation which springs up in the rainy season includes numerous genera, such as Sida and Indigofera, which are largely represented both in Africa and Hindustán Palms also in both countries are scanty, the most notable in Southern India being the wild date (Phœnix sylvestris), Borassus and the cocoa-nut The forests, although occasionally very dense, are cultivated as in the Western Gháts, are usually drier and more open than those of the Malayan type, and are often scrubby The most important timber-trees are the tiin (Cedrela Toona), sál (Shorea robusta), the present area of which forms two belts separated by the Gangetic plain, satin-wood (Chloroxylon Swietenia), common in the drier parts of the peninsula, sandal-wood, especially characteristic of Mysore, iron-wood (Mesua ferrea), and teak (Tectona grandis)

### CHAPTER XXV

### VITAL STATISTICS OF INDIA

The vital statistics of India¹ are derived from five chief Five sources. Of these, the first or European army consists of sources of foreigners under special medical conditions, and subject to returns the disturbing influence of 'invaliding'. The second, or native army, the third, or jail population, and the fourth, or police, are all composed of natives, but of natives under special conditions as regards food, discipline, or labour. It is dangerous to generalize from returns thus obtained, with regard to the health statistics of the ordinary population of India. For that

<sup>1</sup> The literature of Indian health statistics and medical aid may be divided into eight chief classes -(1) Separate treatises by a series of medical observers, dating from the latter part of the 18th century and continuing up to the present time (2) Official special Reports of the Medical Boards of Bengal, Madras, and Bombay on the great outbreak of cholera in 1817, the Medico Topographical Reports (1825-40) of the chief stations of the Madras Presidency, by the Medical Board of that Presidency (3) The Transactions of the Medical Physical Society of Calcutta (1823-39), and of Bombay (1837-76), the Indian Annals of Medical Science (Cal cutta) from 1853-80, other medical journals at different periods in the three Presidencies (4) Reports on the Medical Education of the Antives of India, commencing with vernacular medical schools in Calcutta and Bombay (1820-30), developing (1835-57) into the Medical Colleges of Bengal, Madras, and Bombay, and extending into medical schools at Haidarabad (Deccan), Nagpur, Agra, Lahore, Balrampur (Oudh), Patna, Dacca, Poons, Ahmadabad (5) keports on Vital Statistics by the various Medical Boards, Medical Departments, and Inspectors General of Hospitals, since 1827 these assume a prominent place (6) The Annual Reports of the Sanitary Commissioner with the Government of India, since 1874, and of the Sanitary Commissioners to the local Governments, the Annual Reports of the Inspectors General of Jails, of the Inspectors General of l'olice, and of the health officers to municipal bodies in the various Presi dencies and Provinces (7) Reports by special Committees or Commis sions, such as those on the Baidwan fever, on the cattle plague in Bengal, the Orissa famine of 1866, the Madras famine of 1878, etc Keports of the public hospitals, dispensaries, and other medical charities The author has been unable to test all the dates in this footnote, but he reproduces some of them, unvertised, from a memorandum supplied to him ly Dr Morchcad, formerly of Bombay

population, however, a system of registration exists, and this system forms the fifth source of our data on the subject

Registration of general Why untrust w orthy

In certain Provinces, registration is carried out with some degree of efficiency But the natives shrink from publicity population touching the details of their life They could only be forced to give uniform and absolutely trustworthy returns of births, deaths, marriages, sex, and age by a stringent legislation, and a costiv administrative mechanism, from which the Government wisely abstains In municipalities, however, registration furnishes a fairly accurate account of the vital statistics of the urban population For the rural Districts, special areas in some Provinces were selected for statistical supervision, and this has been now gradually extended, with the exception of certain exceptionally situated tracts, to practically the whole But the results obtained are still necessarily population imperfect

The Census

The Census operations, conducted under special legislation will furnish a general picture of the Indian people every ten But the complete details have, up to the present time of writing, been obtained only for the two Censuses of 1871 and 1881 The chief results of the Census of 1881 are given in chapter ii, and in Appendices I to X at the end of this sc'ume

Sources of erro

In treating of the public health of India, therefore, three points must always be borne in mind. The data are obtained either first, from limited classes under special medical conditions, or second, from limited areas under special statistical supervision, or third, from a general system of registration spread over the whole country, but which has hitherto failed to yield trustworthy results. General averages from such sources, struck for the entire population, can only be accepted as estimates based upon the best information at present available

Death rate m India

Subject to the above remarks, it may be stated that the cyldence goes to show an annual death rate of 32 57 per During the famine of 1877-78, the deaththousand in India rate in Madras was ascertained to be equal to an annual rate of 53.2 per thousand In 1877, the death-rate among the European troops in India was 12 71 per thousand, being the lowest recorded up to that year, in the native army, 13.38 per thousand, in the public jails, 61 95 per thousand, rising to 176 per thousand in the Madras prisons, which were flooded by the famine-stricken population. In 1884, the death-rate returns of European troops in India showed a mortality of

10 88 per thousand, the lowest recorded in any year for which full returns have been compiled In the native army in 1883 the mortality on the total strength was 11 76 per thousand, or including men absent from their regiments, 14 31 per thousand, being about one-half the average rates for 1877-81 mortality also showed a satisfactory reduction, the death-rate having fallen to 33 64 per cent

The returns of births, as given hereafter for each Province, are too untrustworthy to allow of an attempt to calculate the birth-rate for the whole country The average duration of life Average in India is, on slender foundation, estimated at 303 years duration Instead of attempting generalizations, which, although interest ing to the speculative statist, might mislead the actuary and be perverted into an unsound basis for induction, the following paragraphs are confined to the returns as furnished for the separate Provinces, together with the health statistics of the European troops, the native army, and the jail population The following paragraphs are condensed from the Reports of the Sanitary Commissioner with the Government of India, for 1877 and 1883

In Bengal, the system of collecting statistics over specially Vital sclerted areas has been abolished, and an attempt is being statistics made to obtain natural according to the being of Bengal made to obtain returns equally from the whole Province The in 1877 registration of deaths in 1877 showed a ratio of 17 96 per thousand (varying in different Districts from 36 down to 8), which, according to the Sanitary Commissioner, 'must be very much under the truth' The mortality in towns (where the registration is less incomplete) was returned at 32 49 per thousand, compared with 17 39 in the ruial circles Of the total deathrate, 20 24 per thousand was among males, and only 15 69 among females, 'a discrepancy which must be due in the main to defective registration. The birth-rate, which averaged 10 20 per thousand for the whole Province, varied, according to the returns, from 35 in Patná to only 6 per thousand in Bardwan and Bákargani Districts The male births were returned in 1877 as exceeding the female births in the proportion of 118 to 100

Registration of vital statistics in Bengal is still very im-Vital perfect, and it is only with regard to deaths that any attempt statistics of Bengal is made at a general registration The total number of deaths in 186, returned in 1883 as occurring among a population under registration of 66,163,884, was 1,245,676, or at the rate of 184 per thousand (varying in different Districts from a maximum of 36 down to a minimum of 10 per thousand) The defective character of the registration is shown by the fact that the

death-rate among the males was 20 59 per thousand, and among the females 17 08 per thousand, showing an apparent increase of over 18 per cent of male over female deaths It is also exhibited in a comparison of the mortality in towns and rural circles In o6 towns in Bengal where registration is necessarily under closer control, the death-rate amounted to 27 28 per thousand, while in 552 rural registration circles it was only 1849 Compulsory birth registration in Bengal is only enforced in 46 towns and municipalities, with a population of 1,685,150 These returned a total birthrate of 22 08 per thousand in 1883, but that this is below the truth is exhibited by the fact that the deaths exceeded the births in the ratio of 7 87 per thousand, as well as by the fact that the registered male births in towns exceeded the female births by 14 per cent. The following figures show the causes of the registered deaths in 1883, and the ratio they bear to the general mortality -Fevers, 13 81 per thousand, cholera, 1 36, small-pox, o 14, bowel complaints, o 83, injuries, o 35, all other causes, 2 30 per thousand

Vital statistics of Madras in 1877

In the Madras Presidency, both births and deaths were much affected in 1877 by the famine which desolated that part of the country, and registration was conducted under special difficulties Though many defects are consequently apparent, the Sanitary Commissioner is of opinion 'that the relative intensity of the famine in different circles is fairly represented by the mortuary registration' The general registered death-rate was 53 2 per thousand, and in Madras city, 1167 per thousand (see article MADRAS PRESIDENCY, The Imperial Gazetteer of India) Among males, the rate is given as 58 4, and among females 48 of per thousand, 'which points to imperfections in the record of female deaths. The following figures show the causes under which the deaths of 1877 in Madras were classified —Cholera, 12 2 per thousand, small pox, 3 02, fevers, 16 of, bowel complaints, 45, injuries, 05, all other causes, 16 8 per thousand. The number of registered deaths in 1876 was 23 34, and in 1875, 21 1 per thousand. The famine resulted in a marked reduction in the birth rate, the ratio for 1877 being only 16 3, or less than that of 1876 by more than 5 per thousand For every too female births, 107 mile births were registered In the nine Districts where the famine was most severe, the birth-rate was only 12 per thousand, whereas in the eight where the people suffered less, the rate was 20 per thousand Excess of deaths over births in Madras Presidency in 1877, according to the above figures, 36 9 per thousand of the population The registration of births and deaths was not compulsory in Madras in 1877

Registration of vital statistics is still very imperfect in Vital Madras, although better than in the Bengal Districts total number of deaths returned in 1883 as occurring among in 1883 a population under registration of 28,503,100, was 541,930, or at the rate of 190 per thousand (varying in the several Districts from a maximum of 38 6 to a minimum of 11 8 per thousand), the rate of male deaths being 197, and of female deaths 183 per thousand The urban death-rate in 76 towns, with a population of 1,696,075, was 249 per thousand, as against 18 6 per thousand in 153 rural registration circles, with a total population of 26,839,745 The total number of births registered in 1883 was 791,774, or 277 per thousand, a larger number and ratio than in any year since 1869, when registration was first commenced The excess of male over female births is less in proportion in Madras than in any other Province of India, the ratio being 1046 males to 100 females The death-rate from different causes in 1882 was returned as follows -Fevers, 7 1 per thousand, cholera, 12, small-pox, 13, bowel complaints, 07, injuries, 04, all other causes, 8 o per thousand Excess of births over deaths registered in 1883, 87 per thousand of population

In the Bombay Presidency, famine affected the death-rate in Vital 1877, and the year was also more than usually unhealthy, statistics of Bombay cholera and small-pox being both epidemic. The mortality, in 1877 according to the returns, was at the rate of 38 76 per thousand In the famine-stricken Districts the mortality was 55 og, compared with 25.71 per thousand in 1876 The following figures show the causes of the deaths registered in 1877 - Cholera, 253 small-pox, 169, fevers 2079, bowel complaints, 372, injuries, o 46 all other causes, 8 55 per thousand. The birthrate in 1877 was 19 26 per thousand (varying from 29 to 6), or 2 00 per thousand less than the rate for 1876—'a result which is for the most part ascribed to the effects of famine, but also. in great measure, to neglect in registration' For every 100 female births, 111 male births were registered Excess of deaths over births in Bombay Presidency in 1877, 1954 per thousand of the population

Registration shows better results in the Bombay Presidency Vital than in Madras or Bengal, but in the Sind Districts it is still statistics of Bombay very imperfect, and the returns from these lower the average in 1883 for the entire Presidency The total number of deaths returned in 1883 was 420,198, or 25 53 per thousand of the

total population (varying from 41 97 per thousand in Khandesh to 9 19 in the Upper Sind Frontier District), the ratio of male deaths being 26 o2, and of female deaths 25 o2 per thousand The male deaths registered were 111 of, for every 100 female The urban death rate in 62 towns and municipalities, with a total population of 2,105,756, was 29 61 per thousand, as against 24 94 per thousand in 223 rural registration circles, with a population of 14,348,658 The ratio of mortality due to different causes was returned as follows - Fevers, 16 21 per thousand, cholera, 231, small-pox, o81, bowel complaints, 2 14, injuries, 0 36, all other causes, 3 70 The number of births registered during the year was 501,801, giving a rate of 30 50 per thousand of the population, which would be considerably higher but for defective returns from Sind out the entire Presidency, 109 22 male births were registered for every 100 female The excess of the registered births over the deaths was at the rate of 4 97 per thousand of the population

Vital North Western Provinces and Oudh m 1877

The North-Western Provinces and Oudh together returned a statistics of death-rate in 1877 of 19 67 per thousand, varying from 29 to 12 per thousand For Oudh alone, the rate was 171, and for the North Western Provinces alone, 206 The mortality in the towns of the amalgamated Province was 29 43, compared with 18 99 in the rural circles, and of the total death rate, 21 06 was among males, and 1812 among females registration of births, which in 1877 was confined to the municipalities, showed an average rate of 39 22 per thousand, varying from 70 at Urai to 14 at Dehra. Excess of births over deaths, 10 27 per thousand of the population

Vital North-Western l'rovinces and Oudh ın 1883

Considerable improvement in registration of vital statistics s atistics of in the North-Western Provinces and Oudh has been effected since 1877, and birth as well as death registration is now carried on throughout the entire I icutenant Governorship. The statistics, however, still bear internal evidence that at the best they are only approximately accurate. The total number of deaths returned in 1883 (a year of improved health, accompanied by plenty and cheapness of food) was 1,216,297, or at the rate of 27 57 per thousand of the population, the lowest for any year since 1877 (varying from 48 33 to 17 49 per thousand), the rate of male deaths being 28 49, and of femile deaths 26 58 per thousand, the excess of male over female deaths being on an average 15 88 per cent. The urban deathrate in 103 towns and municipalities, with a total population of 2,756,493, was 35 32 per thousand, as agunst 27 05 per

thousand in 1044 rural registration circles, with a population of 41,351,376 The ratio of mortality due to different causes was returned as follows —Fevers, 18 82 per thousand, cholera, 0 41, small-pox, 3 14, bowel complaints, 1 51, injuries, 0 48, all other causes, 3 21 per thousand The mortality from smallpox was unusually high during the year The average birthrate in 1883 was 40 84 per thousand, the highest on record since 1879, when the general registration of births was first introduced into these Provinces, and the highest in any of the Provinces of India in 1883 The birth-rates in the various Districts ranged from 58 24 per thousand in Lalitpur to 20 30 per thousand in Dehra Dun Throughout the Lieutenant-Governorship as a whole, 111 81 boys were born for every 100 Except in the malaria-infested Tarai, the registered births exceeded the deaths in every District, the total excess of births over deaths being at the ratio of 13 27 per thousand of the population

In the Punjab, the death-rate for 1877 was recorded as 20 per Vital thousand, and the same rate applies to both males and females statistics of the taken separately The District average varies from 27 per Punjab thousand in I ahore to 8 in Kohát on the frontier In the towns, in 1877 the mean mortality was 33 per thousand, varying between a maximum of 52 (in the town of Delhi) and a minimum of 12 (in Kohát) In 1877, births were registered only in the municipal towns of the Punjab, and the results showed a birthrate of 31 86 per thousand Excess of births over deaths, 5 per thousand of the population

In 1883, the total number of deaths returned in the Punjab Vital was 475,741, or at the rate of 25 25 per thousand of the statistics of the population (varying in the several Districts from 35 to 16 per Punjab thousand), the rate of male deaths being 25 13, and of female in 1883 deaths 25 39 per thousand The urban mortality in 1883, in 49 towns and municipalities, with a population (excluding that of four hill sanitaria) of 1,310,383, was at the rate of 30 per thousand, as against 25 per thousand in 397 rural registration circles, with a population of 17,512,378 The ratio of mortality due to different causes was returned as follows -Fevers, 16 25 per thousand, cholera, o or, small pox, o 64, bowel complaints, 0 77, injuries, 0 28, all other causes, 7 29 per thousand The average birth-rate during the year was 39 per thousand throughout the Punjab as compared with an average of 41 in municipal towns Throughout the Punjah as a whole, 115 14 boys were born for every 100 girls, or an excess of 15 14 per cent of male over female births. The excess of

births over deaths was at the rate of 14 per thousand of the general population. The year, however, was an exceptionally healthy one, and the mortality from the chief diseases was less than in any year since 1877.

Vital statistics of the Central Provinces in 1877

In the Central Provinces and in Berar, the registration of births and deaths is more general, and the results obtained approach nearer to accuracy than in any of the other Provinces of India The recorded death-rate in the Central Provinces in 1877 was 23 of per thousand, varying from 38 in Mandla to only 18 in Nagpur District Among males the death-rate was 25 66, and among females 22 11 per thousand In the towns, the rate was 35 86 per thousand In 1877, the total number of births registered in the Central Provinces show a rate of 30 26 per thousand, varying from a maximum of 45 per thousand in Biláspur to a minimum of 31 in Nagpur proportion of male births recorded was III for every 100 Excess of registered births over deaths in female births the Central Provinces in 1877, 15 35 per thousand of the population

Vital statistics of the Central Provinces in 1883

In 1883, the total number of deaths returned in the Central Provinces, among a population of 8,817,185 under registration, was 304,763, or an average rate of 34.56 per thousand (varying in the several Districts from 48 84 to 26 13), the rate of male deaths being 35 83, and of female deaths 33 28 per thousand, the excess of male over female deaths being o per cent The urban mortality in 1883, in 74 towns and municipalities, with a total population of 757,092, was at the rate of 35.56 per thousand, as compared with 34.48 per thousand in 94 rural registration centres, with a population of 8,060,093 The ratio of mortality due to different causes was as follows -Fevers, 1986 per thousand, cholers, 184, smallpox, o 53, bowel complaints, 3 o2, injuries o 52, all other causes, 879 per thousand I otal number of boths regis tered, 357,864, or at the average rate of 4050 per thousand, varying in the several Districts from 54 29 to 34 15 births preponderated over female births by 761 per cent The excess of registered births over deaths was at the rate of 6 og per thousand of the population

Vital sta isles of Berre in 1877 In Berar, the general registered death-rate was returned in 1877 at 281 per thousand. In the towns alone the mortality was 314 per thousand. The birth-rate shown by the returns of 1877 was 395 per thousand, varying from 47 in Akola to 35 in Wún District. The number of male births recorded was 109 for every 100 female births. Excess of

births over deaths in Berar in 1877, 11 40 per thousand of the population

The year 1883 was a particularly unhealthy one in Berar, Vital owing, it is supposed, to abnormally heavy rainfall, and a severe of Berar epidemic of cholera largely raised the mortality returns The in 1883 total number of deaths returned during the year was 135.081. or at the rate of 51 3 per thousand of the population (varying in the several Districts from 657 to 393 per thousand), the rate of male deaths was 51 4, and of female deaths 51 3 per thousand, the excess of male over female deaths being The urban death rate in 11 towns and municipalities, with a population of 138,378, was 53 2 per thousand, as against 51 3 per thousand in 134 rural registration circles. with a population of 2,491,640 The ratio of mortality due to different causes was as follows -Fevers, 20 3 per thousand, cholera, 106 small-pox, 15, bowel complaints, 72, injuries, 04, all other causes, 113 per thousand average birth rate in 1883 was 403 per thousand, varying from 43 2 to 37 8 per thousand, the male births exceeding the female by 65 per cent Owing to the cholera epidemic, and general unhealthiness of Berar in 1883, the registered deaths exceeded the births in that year in the ratio of 11 per thousand of the population

In Assam, the system of registration in 1877 was that Vital formerly in vogue in Bengal, of which this Province until statistics of Assam recently formed part. The returns were taken over certain in 1877 selected areas, and the results were quite untrustworthy death-rate, as ascertained from these returns, was only 109 per thousand varying in the several Districts from 20 to 5 per thousand The births recorded in the selected areas were at the rate of 20 per thousand, ranging from 34 to 10 per thousand The figures show an excess of deaths over births in Assam in 1877 of 49 per thousand of the population

Compulsory registration throughout the whole of Assam, Vital with the exception of certain hill tracts, was not introduced statistics of Assam till the latter half of 1882, and the results, as might be ex- in 1883 pected, do not even approximate to accuracy In 1883, the total number of deaths registered was returned at 122,032. or an average of 27 14 per thousand of the population (varying in the several Districts from 41 89 to 16 27 per thousand), the rate of male deaths being 28 34, and of female deaths 25 89 per thousand Excess of male over female registered deaths, 16 per cent. In 21 towns and municipalities, with a total population of 99,202, the average death-rate was

30 07 per thousand, as against 27 08 per thousand in 657 rural registration circles, with a population numbering 4,428,732. The ratio of mortality due to different causes was as follows—Fevers, 14 90 per thousand, cholera, 3 29, small pox, 1 36, bowel complaints, 3 19, injuries, 0 27, other causes, 4 12 per thousand. The average birth-rate in 1883 was 23 91 per thousand, those of the males exceeding the females by nearly 10 per cent. Excess of registered deaths over births, 3 23 per thousand of the population.

Vital statistics of British Burma in 1877

In British Burma, registration is shown to be even more defective than in the worst Provinces of India The average death-rate, according to the returns in 1877, was 17 44 per thousand, the rate for males being 18, and for females 16 per thousand. In Myanaung the deaths were returned at 119, and at Maulmain at less than 13 per thousand In the towns the mortality was 34 per thousand, compared with 15 in the rural The birth returns showed a rate of only 21 per 'and this general average,' to use the words of the thousand Report in 1877, 'is made up of such extremes that no reliance can be placed on the figures' In one place the birth-rate was no less than 115 per thousand, in another it was as low as 5 Excess of registered births over deaths in British Burma in 1877, 1 per thousand of the population

Vital statistics of British Journa in 1883

No improvement in registration in British Burma seems to have been effected up to 1883 Indeed, in that year the death-rate had fallen below the figures returned for 1877 1883, the total registered deaths numbered 53,583, or a rate of 14 67 per thousand of the population under registration (varying in the several Districts from 21 42 to 9 22), the male deaths being returned at 1537, and the female deaths at 13 86 per thousand. The excess of registered male deaths over female deaths was 27 per cent towns and municipalities, with a total population of 425,775, the registered death rate was 25.50 per thousand, against 13 24 per thousand in 823 rural registration circles, with a population numbering 3,227,854 The ratio of mortality due to different causes was as follows -Fevers, 7 19 per thousand, cholcra, o 60, small-pox, o 19, bowel complaints, o 76, injuries, o 17, other causes, 576 The birth rate of the Province was returned at 23 per thousand, ranging in male births exceeded those of the females by 6 per cent. The registered births exceeded the deaths in the ratio of 8 o per thousand of the population A revised scheme of registration for British Burma is now (1884) under consideration, the adoption of which it is hoped will result in more accurate statistics

After what has been stated in the introductory paragraph of Danger of this section, it is manifest that the figures quoted from the statistics Reports of the Sanitary Commissioner with the Government of India are of little or no value for the purpose of establishing the comparative healthiness or unhealthiness of the different portions of the country. To construct a comparative table out of the provincial returns would be misleading, if any attempt were made to use it for actuarial purposes. But the tables on the four following pages may be interesting as showing the defects and uncertainties of Vital Statistics in India, as well as the progress towards accuracy which has been effected between 1877 and 1883 in registering births and deaths among the general population. The wide variations in both the birth and death rates for various Districts usually arise from different degrees of imperfection in the registration.

Health of the Elropean Army—The sanitary statistics Health of the army in India are, in every way, more trustworthy than European those obtained for the general population, and as they have Army, been regularly collected on a uniform system for a number of years, it is possible to draw valuable inferences

The sanitary history of the European Army during 1877 its general was more favourable than in any previous year for which the statistics are on record. The total strength of the European Army in India in 1877 was returned at 57,260 men, the admissions into hospital numbered 71,992 (1257 per thousand of average strength), daily sick, 3196 (56 per thousand), deaths, 728 (1271 per thousand). The averages for the five years 1871–1875 were as follows—admissions into hospital, 1394 per thousand, daily sick, 57, deaths, 1762 per thousand. Not only, writes the Sanitary Commissioner, 'do the results compare favourably with the averages of the five years 1871 to 1875, but, what is deserving of special notice, the admission-rate and death-rate are the lowest which have yet (1877) been attained'

In 1883, the total strength of the European Army in India and 1883 was 55,525, the werage admission into hospital being at the rate of 1336 per thousand, daily sick, 63 per thousand, while the deaths were 1088 per thousand, the lowest on [Sentence continued on page 680

BIRTH RILL MONG GINIRAL POLUTILION IN INDIAN PROVINCES IN 1877

	Excess of	Births per 1000 of Population		•	_					49	36.9	19 54	
	Fxccss of	Deaths per roce of Popusation	1	0,	10 27	. 00	15.35	11 40	8				i
1	Number of	ir cvery 100 I cm des born	J	811	117	111	111	109	105	123	107	111	•
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	Population	Registi taen		5> 251,153	2 2,51,534	, 022,071	1 to sot 4	510151 -	20,4951	120,621	20 200 542	16,151 741	
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	<u>ن</u> د د	·	i 1	. Bengal	South Western Provinces,1	Punith,	Centeral Proximees	Burr,	Rittish Burms	Lysam	Widi is Presidency,"	Bombay Pics dency,"	The special set of the second
			1	•	Х	7/C V1	IGI	88.			Mad≀,	Bomba	1

1 Births were not registered in Oudh in 1877

2 It should be remembered, as alread, stated, that the averages in Madra, and to a less degree in Bombay, were powerfully influenced by the Famine (1877) The average death raic in 1876 was 23 34 per thousand in Medias, and 21 81 per thousand in Bombay. The birth rate in 1876 in Madias was 21 6 per thousand and in Bombay, 21 35

Death-rme among General Population in Indian Provinces in 1877

1			·							
IE PER 1000	Female	15 69	18 12	20 00	22 11	-	16 33	4 6	48 06	36 or
DEATH RATE PER 1000	Male	Ö	21 06	20 00	25 66	-	18 47	6 30	28 40	241 32
1000 OF	Mean	96 41	19 61	20 00	23 91	28 10	17 44	06 01	53 20	38 76
RATIO OF DPALIES PER 1000 OF POLLATION IN DISTRICES		. »	12	∞	18	20	11	v	41.	82
RATIOO	Maximum	36	29	27	38	34	119	29	611	101
Average Population	Mile	415	409	1991	113	134	33	131	222	130
Area in	Square miles	144,614	104,402	104,975	65,162	16,227	88,283	27,319	138,318	124,196
Population under	hegistration	59,993,332	42,724,741	17,487,125	7,408,074	2,184,945	2,934,981	3,805,364	29,209,542	16,181,741
PROTINCE		Bengal,	North Westein Provinces and Oudb,	Punjab,	Central Province	Berar,	British Burnia,	Assam,	Madras Presidency,	Bombay Presidency,
			10	ENC VV	OIIS ONT:	g raq			Madr	Romb

<sup>1</sup> Not given by Sanitary Commissioner

by the Famine (1877) The average death rate in 1876 was 23 34 per thousand in Madias, and 21 81 per thousand in Bombay The birth rate <sup>2</sup> It should be remembered, as already stated, that the averages in Madras, and in a lesser degree in Bombay, were powerfully influenced in 1876 in Madras was 21 6 per thousand, and in Dombay, 21 35

BIRTH RATE ANONG GIVIERS POPU ATION IN INDIAN PROVINCIS IN 1883

1	Excess of	Deaths ever		7 57				11 00		323			1
ſ	L xcess of	Births over Deaths per 1000 of Population	1		13 27	14 00	6 03		800		8 70	4 97	-
1	Number of	Males born to every roo I cm des born	ı	114 00	111 81	115 14	19 201	106 50	00 90I	109 73	104 60	109 22	-
	Politivina	Mean fci the Province		22 05	40 84	39 00	40 59	40 30	22 92	23 91	27 70	30 50	1
-	RAID OF PRESENT TOO OF PULLANDS	Mmmum frm) ouc		6 40	20 39	10 04	34 15	37 80	16 60	13 28	13 70	15 92	
	Raino of Pin	M camma for my one District		49 17	58 24	53 32	54 29	43 20	31 65	59 13	40 90	44 09	:
-		Population till ler Registi itim		1,685,159	44,107,869	18,842,261	5,817,185	2,630,018	3 653,629	4,527,934	28,503,100	16,454,414	
		Pion ce		(Bengal (46 Numerp dittes and Jowns),	North Westein Province and Owth,	Punjah,	Central Provinces	Beru,	British Burma,	( Assam,	Madras Presidency,	Bombay Presidency,	
					λ.	E/C	 7.1:1 1123.3	ıa			Mad	Dom	

DFAIH RATE ANONG GENERAL POPULATION IN INDIAN PROVINCES IN 1883

	F	Population	Aream	Average	_	RATIO OF DIAFIIS PER 1000 OF POPLIATION IN DISTRICTS	I IOCO OF RIC I S	Death Raig Plr 1000	'E PLR 1000
1	PROTING	under Reg stration	Square Miles	per Square Mile	Махітит	Munum	Mean	Male	Female
	Bengal,	66,163,884	144,863	457		9 93	18 82	20 59	17 08
	North Western Provinces and Oudh,	44,107,869	106,104	416	48 33	17 49	27 57	28 49	26 58
ACK	Punjab,	18,842,264	107,989	175	35 00	00 91	25 25	25 13	25 39
g(IIS,	Central Piovinces,	8,817,185	71,245	124	48 84	26 13	34 56	35 83	33 28
LKE	Berar,	2,630,018	16,062	164	65 70	39 30	51 30	51 40	\$1 3o
	British Burma,	3,653,629	75,087	49	21 42	9 22	14 67	15 37	13 86
	l (Assam,	4,527,934	127,666	1162	41 89	16 27	27 14	28 34	25 89
4	Madras Presidency,	28, 503, 100	139,900	221	38 60	11 80	00 6I	0/ 61	18 30
ă	Bombry Presidency,	16,454,414	123,860	133	41 97	9 19	25 53	26 02	25 03

Desclusive of the Khási and Jaintia Hills, and of Tura station in the Gaio Hills

Sentence continued from page 675

record since 1870. The loss from invaliding was 33 per thousand, making a total loss from all causes of 44 per thousand of average strength or about 12 per thousand below the average of thirteen previous years. The ratio of loss due to invaliding in 1883 was about 4 per cent below the average. In 1883, the death-rate in the Bengal Army was as low as 11 21 per thousand. In Madras, the death-rate in 1883 was as low as 10 19 per thousand, the lowest in the three Presidencies. Rate of mortality in the Bombay Army in 1883, 10 50 per thousand of average strength.

Nine chief causes of sickness

In all three Presidencies, the same diseases form the nine chief causes of sickness, with slight variations in the order in which they occur These nine were —malarial fevers. venereal diseases, wounds and accidents, abscess and ulcer. respiratory diseases, rheumatism, diarrhœa, hepatitis, and dysentery They are here given in the order of their frequency (1883) in Bengal Malarial fevers, which stood first in both Bengal and Bombay (486 and 436 admissions per 1000 respectively), were replaced at the top of the list in Madras by venereal diseases (289 admissions per 1000), respiratory diseases and rheumatism, which took the fifth and sixth places in Bengal, were seventh and ninth in Madras, and fourth and sixth in Bombay, whereas dysenters and hepatitis, which came fifth and eighth in Madras, came ninth and eighth in Bengal, and occupied the same position in Bombay I he arrangement of the diseases in all three Presidencies accorded generally, to a remarkable extent, with the experience of previous years, and the year 1883 may be taken as a typical one admissions into hospital from all causes, 1336 per 1000 in all India. In the Bengal Army, the average admissions were 1463 per 1000, in Madras, 1013, and in Bombay, 1249 per 1000

The chief causes of mortality The six principal causes of deaths in Bengal in 1877 were in the order of their frequency enteric fever, apoplety, hepatitis, cholera, remittent and continued fevers, and dysentery. In all three Presidencies, the six forms of disease which contributed most to the death-rate were the same. The total death rate from these six diseases were—in Bengal, 6 60 out of a total mortality of 11 21 per 1000, in Madras, 6 47 out of a total mortality of 10 19 per 1000, and in Bombay, 5 39 out of a total of 10 50 per 1000. Enteric fever headed the list of the chief causes of death in all three Presidencies, Madras having the highest ratio (2 86 per 1000).

followed by Bengal (252 per 1000), and Bombay (155 per 1000)

Cholera was not prevalent during 1883, and added but little to the army mortality throughout India The experience of a number of years goes to show that enteric fever is in the main a disease of young soldiers new to India, the majority of sufferers being men in their first or second year With reference to the great prevalence of venereal diseases in the European Army, it is stated that 'the working of the lock hospitals in all three Presidencies during 1877 must be pronounced to have been more or less a failure,' and in 1883 the admission rate into military hospitals for venereal diseases was reported to be only a fraction lower in protected than in unprotected stations

Out of a total, in 1883, of 604 deaths in the European British Causes of Army in India, 133 were due to enteric fever, 26 to other fevers, invaliding 51 to cholera, 63 to hepatitis, 61 to apoplexy, 38 to phthisis, 37 to diseases of the respiratory organs, 17 to heart disease, and 23 to dysentery and diarrhoea.

The following tables show—(1) the health-statistics of the European troops throughout all India, for a series of years ending 1883, and (2) the sickness, mortality, and invaliding among those troops in 1883, arranged separately under the three Presidencies -

DEATH-RATT AMONG ELROPEAN TROOPS IN INDIA 1871-1883

		Ryrio	1 ER 1000	OF ALER	age Stre	/G LH
Period	Strength	Admissions into Hospital	Daily Sick	Deaths	Invaliding	Torat Foss
1871 to 1875 (averye), 1876, 1877, 1878, 1579, 1880, 1881, 1882, 1553,	58,432 57,858 57,260 56,475 49,582 51,796 58,728 57,269 55,525	1394 1361 1257 1651 1977 1789 1605 1445 1336	57 56 55 68 78 74 70 65 63	17 62 15 32 12 71 21 46 24 28 24 85 16 80 12 07 10 88	43 09 38 90 42 25 45 49 26 38 33 33	61 54 55 66 73 51 55 45 44
Average,	56,666	1492	63	17 43	40	57

SICKNESS, MORTALITY, AND INVALIDING AMONG EUROPEAN TROOPS IN THE THREE PRESIDENCES DURING 1883

-			Rvin	0 1 FR 1000	OF AVER	4416 A 1A	NGTH.
1	Presidenci	Average Strength	Admissions into Hospital	Daily Sick	Denths	Invaliding	Total Loss
	Bengal,	34,079	1463	66	11 21	31	42 21
i	Madras	10,498	1013	59	10 19	33	43 19
	Bombay,	10,948	1249	57	10 50	38	48 50

Health
of the
Native
Army,
in 1877
and 1883,

HEALTH OF THE NATIVE ARM -I he sickness and mortality in 1877 in the regular Native Armies of Bengal, Madras, and Bombay, the Central India Regiments, Punjab Frontier Field Force, and Haidarabád Contingent, are shown by the following figures -average strength of troops (present with regiments), 113,966, admissions into hospital, 1030 per thousand, daily sick 32, deaths from cholera, 153, deaths from all causes, 1090 or, including men dying while absent from their regiments, 13 38 per thousand In 1883, the total average strength of the Native Army of India (present with regiments) was 114,830, admissions into hospital, 923 per thousand, average daily sick, 31, deaths from cholera, 1 15 per thousand, deaths from all causes, 11 76 per thousand of actual regimental strength, or 14 31 per thousand, including deaths among absentees Malarial fevers are the chief cause of admission into hospital, wounds and accidents come next, followed by dysentery, diarrhoa, and enteric fever The mortality amounted to 27 28 per cent of the total treated, the lowest since 1877 Respiratory diseases were the cause of the largest mortality, namely, 3 91 per thousand, followed by fevers, 141, and by cholera, 115 per thousand

of Bengal,

In the Bengal Native Army, the death rate in 1883 was 1055 per thousand, a lower ratio than for any one year since 1877, when it was 1032 per thousand. In the Central India Regiments, the mortality was as low as 789 per thousand in 1883, compared with 971 in 1877, and with 1110, the average of the ten years preceding 1877. In the Punjab Frontier Force, the death-rate, including deaths among absentees, was 2335 per thousand in 1883, and excluding absentees, 2146, while in 1877 the rate was 1226 per thousand. Altogether, the Sanitary Commissioner reports that the health of the

Native Army in Bengal is very satisfactory, and that there is still a tendency towards diminishing mortality in normal years

In the Madras Native Army, the regimental mortality, in- of Madias, cluding deaths among absentees, was 14 36 per thousand in 1877, and 12 51 per thousand in 1883 Excluding deaths of absentees, the ratio was 11 80 per thousand in 1877, and 10 76 per thousand in 1883 Besides garrisoning its own Province, the Madras Army supplies troops for British Burma and the Andaman and Nicobar islands, as also to certain Districts in the Central Provinces, and to Cuttack District in Orissa

In the Bombay Native Army, the death-rate, including of Bombay deaths among absentees, in 1877 was 12 96 per thousand, varying from 11 65 for regiments in the northern Division of Bombay, to 18 81 for those in the Konkan In 1883, the rate of mortality, including deaths among absentees, was 14 96 per thousand, excluding absentees, the rate among those actually serving with their regiments was 12 81 per thousand

The returns for the Haidarábad Contingent, both for 1877 Haidar and 1883, are more favourable than those for any other portion abad Con tingent of the Native Army The admissions into hospital in 1877 were only 806 per thousand, daily sick, 26, and mortality (including deaths among absentees), 9 61 per thousand The number of deaths from cholera, however (443 per thousand), was much above that recorded in any other part of the Native Army In 1883, the admissions into hospital had fallen to an average of 572 per thousand, the daily sick-rate to 20 per thousand, and the mortality to 7 50 per thousand

The sickness and mortality in the Regular Native Army Results in and other forces in 1877 and 1883 are compared in the three Presifollowing tables -

aencies compared

SICKNESS AND MORTALITY AMONG NATIVE TROOPS IN 1877

	1000, Jeath, entees	ength ith	R	LTIO I	PER 10	00.
PRESIDENCY ETC	Deaths per a including Di among Abser	Average Strengt (present with Regiments)	Admissions into Hospital	Daily Sick	Deaths from Cholera	Deaths from all Causes
Bengal Native Army, Madias ,, ,, Bombay ,, ,, Central India Regiments, Punjab Frontier Field Force, Haidarabád Contingent,	13 63 14 36 12 96 10 59 14 55 9 61	39,649 25,304 23,388 5,046 10,359 7,220	1096 860 1074 810 1403 806	33 28 33 25 41 26	35 2 79 1 93 79 4 43	10 32 11 80 10 90 9 71 12 26 9 42
Indra,	13 38	113,966	1030	32	53	10 90

SICKNESS AND MORTALITY AMONG NATIVE TROOPS IN 1883

	r roco, Death- sentees	ingth ith s)	RA	TIO I	PER 10	00
Presidency, etc	Deaths per including D among Abser	Average Strengt (present with Regiments)	Admissions into Hospital	Daily Sick	Deaths from Cholera	Deaths from all Causes
Bengal Native Army, Madras ,, ,, Bombay ,, ,, Central India Regiments, Punjab Frontier Field Force, Haidarábad Contingent,	13 98 12 51 14 96 10 16 23 35 9 31	40,932 27,703 23,576 5,197 10,438 6,983	985 737 994 595 1,419 572	32 27 35 19 45 20	o 56 2 92 0 47 0 39 0 00 2 15	10 55 10 76 12 81 7 89 21 46 7 59
India,	14 31	114,830	923	31	1 15	11 76

Health of the jail popula• tion• Health of the Jail Population—The Report of the Sanitary Commissioner with the Government of India for 1877, was the first which included the vital statistics of the jails of all three Presidencies 'The year 1877, to which it refers,' says the Sanitary Commissioner, 'is particularly unfortunate for commencing this change, as, owing to famine and distress over great portion of both Madras and Bombay, the number of prisoners in those parts was suddenly increased far beyond all precedent, the new prisoners were, in large proportion, received in a low state of health, consequent on continued privation, the jails having such large and unexpected calls for accommodation on them, were, as a rule, greatly overcrowded, and the sickness and mortality, as was to be expected, have been lamentably in excess of former years'

General statistics, 1877 The average number of prisoners throughout India in 1877 was returned at 110,147, admissions into hospital numbered 1017 per thousand, daily sick, 36 per thousand, average death-rate, 61 95 per thousand. The months of October and November gave the highest admission rate, 97, and the month of November the highest death-rate, 918. Dysentery, diarrhoea, and cholera were the main causes of mortality, the three together accounting for 33 61 out of the total of 61 95 per thousand. There are no previous figures with which these general results of 1877 can be compared, they deserve attention as the first collection of statistics regarding the sick ness and mortality among the prisoners of all India, a collection which cannot fail in a few years to contribute very valuable

information' The returns for the Bengal Presidency were very Returns favourable, the mortality being 31 88 per thousand, as comfor the pared with 37 51 in 1876, 33 65 in 1875, and 46 09, the sidences, average for the ten-year period, 1864-73. In the Madras Premi 1877, sidency, the returns showed a mortality of 176 01, while the ratio for the Bombay Presidency was 54 37 per thousand. The causes of these high figures have already been indicated. In only 17 of the 34 jails in the Madras Presidency was the death-rate under 100 per thousand, in the others it varied much, rising to 200, 300, 500, and in one (Coimbatore District Jail) to 657 per thousand. And in Bombay Presidency, where similar causes were at work, though in a minor degree, the mortality, 54 37 per thousand, was double what it had been for years

Although 1877 was an abnormal year, especially in Madras in 1885 and Bombay, owing to the causes stated above, the returns for 1883 show a great improvement in the vital statistics of Indian jails over those of the previous five years The average prison population in India in 1883 was 88,174, as against 112,670 in the previous five years, the admissions into hospital were 996 per thousand, as compared with an average of 1189 in 1877-81, average daily sick, 36 per thousand in 1883, as compared with 44 9 per thousand in 1877-81 The cholera mortality was in the ratio of 2 28 per thousand in 1883, against an annual average of 448 for the previous five years, deaths from dysentery and diarrhea showed a ratio of 1064 per thousand in 1883, against 24 97 per thousand in the years 1877-81, while the deaths from all causes were 31 37 per thousand in 1883, as against 63 or per thousand in the five years 1877-81 The heaviest jail mortality in 1883 was in the Central Provinces (70 97 per thousand), Bengal (52 21 per thousand), and Assam (43 12 per thousand), while the lowest ratio was reached in Beiar, with only 8 49 deaths per thousand

The following tables condense the health statistics of the Indian jails in 1877 and in 1883 —

## SICKNESS AND MORTALITY IN INDIAN JAILS, 1877

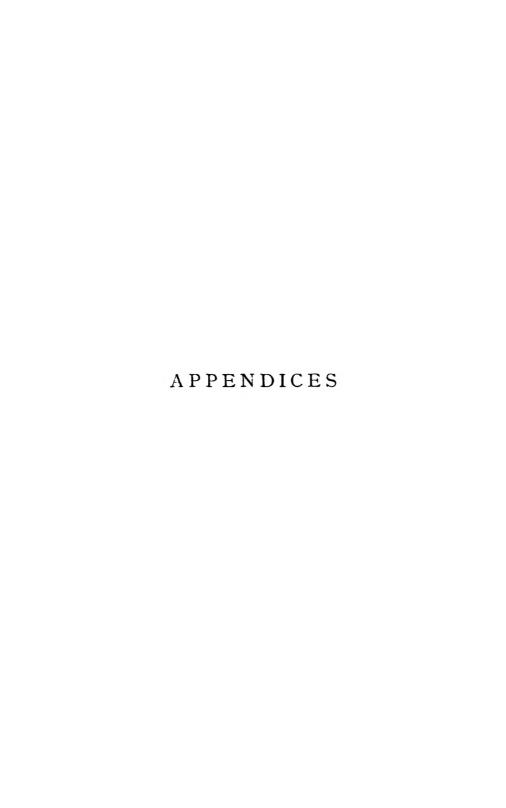
	tt.	RATIO	PER	1000 OF	1VF1 A	e Stre	NGTH
1	treng	50			Dea	ths	
PROVINCE	Average Strength	Admis 10ns 1nto Hospital	Darly Sick	Cholera	Powel Complaints	Atrophy and Anæmu	All Causes
Bengal Proper North Western Provinces 1 Oudh 1 Punjab Central Provinces Berar Assam British Burma Madras 2 Bombay 2 Andamans	17 862 21 668 6 726 12 129 3 484 963 1 261 4 686 20 328 11 531 9 039	1276 535 504 1504 907 937 1382 844 967 935 1687	39 21 16 37 37 26 40 38 40 27 76	8 29 1 43 08 29 11 10 19 63 26 12 3 64	18 98 5 45 2 08 10 64 12 92 1 04 23 00 18 56 85 15 26 19 5 20	3 42 1 89 1 19 1 07 12 92 5 19 2 38 4 27 24 50 8 67 7 19	49 66 19 71 10 56 33 80 45 06 15 58 56 30 56 76 176 01 54 37 34 30

<sup>&</sup>lt;sup>1</sup> These although now under one Local Government are shown separately for comparison with former years. The favourable results in Oudh are worthy of attention.

# SICKNESS AND MORTALITY IN INDIAN JAILS, 1883

	' କୁ	RATIO	1 F R	1000 01	Mik	40 F STR	LNGTH
_	trens	v			De.	uhs	
Province	Average Strength	Admissious into Hospital	Dails Sich	Cholcra	Bowel  Complints	Atrophy an l	All Causes
Bengal Proper	14 288	1498	50	4 27	23 44	2 94	52 21
North-Western Provinces	22,924	563	23	2 18	4 32	1 48	19 76
Punjab Central Provinces	12 128	951	27	- 0.	6 18	I -4	29 11
Berar,	3 875 1 1 060	558	36 14	2 84	46 71 1 89	4 13	70 97 8 49
Assam	1 206	2125	<b>`5</b> 6	5 80	16 58	3 32	43 12
British Burnia, Madras	7 666	1159	39 32	796	7 96 12 78	1 55 2 61	28 94 29 87
Bombay	7 806	734	27	2 05	670	1 67	34 33
Andamans,	11 211	1454	67		2 87	69	19 63

<sup>&</sup>lt;sup>3</sup> It should be remembered that the mortality in the Madras and Bombay Jails a 1877 was greatly increased by the reception of starving prisoners during the fumine



APPENDIY I -Area, Towns and Viilages, Houses, Population, etc of British India in 1881 (Compiled from the Tabulas Statements appended to the Imperial Census Report)

	Persons per	5000 5000 5000 5000	64	422772 42742	0 9
BER OF	Houses per square mile	46 29 60 33	65	32 28 32 86 16 86	37
AVERACE NUBER	Persons per	592 669 263 549	418	284 218 479 623 354 236	360
VERACE	Villages etc per 100 square miles	37 20 137 32	66	22 22 32 18 18	62
⋖	Persons per	221 133 360 177	416	117 105 151 170 113	222
	Total Population	31,170 631 16,454,414 69 5,5,861 18,850,437	44,107,869	9,838,791 4,881,426 2,672,673 460,722 178,302 3,735,771	911,075 561,460 33,570,485 102,850,879 99,038,018 201,888,897
Polul ATION	Females	15,421,043 8,497,718 7,95,696 34,625,591 10,210,053 3,640,384	21,195,313	4,879,356 2,377 723 1,292,181 211,878 77,863 1,745,766	99,038,018
	Males	52,648 5,711,325 15,421,043 15,749,588 24,598 2,822,41 8,497,718 7,956,696 264,765 11,036,774 34,625,591 34,911,270 34,324 2,706,914 10,210,053 6,640,384	105,421 6,866,503 22,912,556 21,195,313	4 959,435 2,503,703 1,380,492 248,844 1091,005	102,850,879
	Ocupied Houses	5,711,325 2,822,741 11,036,774 2,706,914	6,866,503	2,336,976 859,388 466,027 64,118 22,357 677,362	33,570,485
	Towns Villiges Man 17,	52,648 24,598 264,765 34,324	105,421	34,612 22,408 5,585 739 739 15,857	561,460
	Area in squ ne nules	141, cot 124, 122 193, 198 106, 632	111,901	84.445 46,341 17,711 2,711 1,581 87,220	911,075
	Provinces	Government of Madras, of Bombay, with Sind, of Bombay, with Sind, Lieutenant Governorship of Bengal, of the Punjah,	Western Provinces,	Chief Commissionership of Oudh, ", of Central Provinces, ", of Assain, Commissioner hip of Berar, of Almere, of Coorg Chief Commissionership of Britsh Burma,	TOTAL OF BRITISH INDIA,

1 The area returned for Bengal includes 5976 square miles of unsurveyed and half submerged Sundarbans The figures for Bengal also include 36,634 square miles of area, and 2,845,405 of population, belonging to Native States superintended directly by the Provincial Government

2 X

APPF ADIA II -Towns and VIII was in Brilish India, classified according to Population, in 1881

(Comfuled from 11 e Imperial Census Report)

	Total Number of Villages, and Towns		52,048	264,763	31,324	105,421	34 613	34 05 6	44.40	5,505	139	503	,	15,857	1	561,450	
ł.	Upwards of _ 50 ~ n In habitints	,	o c	=	æ	<u> </u>	ŗ	٠ -	****			_		~		53	į
	From 20 000 to 50 000 In h thitants		13	77	13	<u>8</u>	,			N (	N		0.	~		ક	
1	From 15 000 to 20,000 In hub tants			14	×	8		°	•	. 10	-			4		75	1
	From 10,000 to 15 000 In habitants		8 <del>4</del> 65	6	20	51		_		<u>ہ</u>		_	_	и	1	225	-
	From 5000 to 10 000 In hibitants		401	146	115	192		32	4	54	4	<b></b>		0		1,064	.
	From 3000 to 5000 In bubbt unts		313	340	340	483	ţ	<u>.</u>	_	ŝ	<b>=</b>	-		∞ _		2,445	
1	2000 XXO In that t		1,291	1 058	<u>6</u>	1,099		121	35	73	91	'n		19		4 952	
•	from to coo In-		5,042 2,464	6,00	2,954	5 941		6	350	326	SI	91		1 +2	1	24 979	1
	From 500 to 1000 In habit ints		5, 179	23 501	6,348	16,690		3, 370	1,20,5	100	125	36		819		68,123	
,	Lown 200 to 500 to 500 to 100		14007	07, 07	11,579	34,517	-	11 2 13	r Ci,	1,23.1	#	6 <b>† I</b>		4,5%		100 284	
1	With less thin zeo lu li dut unts		7 007	105,26,	11,937	46,096		10,077	00t t1	2 225	17.1	234		9 063		298,161 100 284	
****	Priving 85		Cove nment of Mairrs, of Lond, of Bombry and Sand,	I reason the Governorship of Bengal		Western Provinces, Chief Commissionership of Ough,	,, of the Central	1.10\mite	Chief Comm stones hip of Assum,	Commissionership of Berur,	, of Mmcre,	of cost,	Chiel Commissionership of Bettish	13 1 m <sub>1</sub> ,		JOIN FOR BRITISH INDIA,	

1 The details and the total of villages in Assum differ by 989 villages in the Guo and Niga Hills, which were not classiful according to population

2 Details available for only 725 villages

APPENDIY III -- CLLIIN MED, CULINABLE, AND UNCULIIVIBLE AREN, LAND RENEWE, ETC., IN 1881

# IN PROVINCES FOR WHICH RETURNS EXIST

# (Compiled from the Proxincial Census Reports)

1														
ncidence it per d Acre,	u sarraya ns Yera Sultusi	s d	5 0g		Noteturns 4 4 4	6 84	1 84	9	No rets					
c ber	Average incidence of Government Revenue per Cultivated Acre		414	#* 01	0 4 0	3 11g	₹6 o	45 T 75	0	4 %	2 942			
Total Rental		7	6,716,181	No returns	13,409,190 4,879,054	11,647,767	1,326,024	No returns No returns 36,058	No returns	No returns	38,094,280			
Total Govern	Total Govern ment Land Revenue, includ ing Cesses and Local Rates levied on Land		5,130,003	3,605,097	4,441,784	6,573,536	647,345	383,543	40,933	703,237	24,538,212			
RE MILES	Un cultivable		7,118	No returns		24,659	19,496	No returns 860	No returns 820	No returns	83,887			
ARFA IN SQUA	Cultivable		13,223	12,677	No seturns 34,261	19,266	20,163	No returns 1,773	36	43	101, 541			
Governyfni Assi sa d Arfa in square milds	Caltarated		38,753	51,015	No returns 32,467	52,056	24,462	6 714 10,069	910	5,400	222,032			
GOVERNUFA	Total		59,094	63,692	No return, 97,662	186,56	64 121	6,714	1,766	5,443	407,460			
Total Area	Total Area Assessed and Unasses ed in square nules		140,821	117,757	150,588	111,901	84,445	27,666	2,711	87,220	843,6261			
	Provincen			p of Bengal, the Punjab, hip of the ces and Oudh, up of Assan ces), erar, ord brown prof Serar, ord prof British prof British										TolAI,

1 The areas in this column are in some cases only approximate to those given in the general table of area and population of British India for which Province no details of cultivated, cultivable, and uncultivable area are available.

APPENDIX IV -- Popul vilon of British India, Classifiyd according to Sex and Age, in 1881

(Congiled from the Tables of the Importal Consus Report)

The state of the s	1	Ä	Man	!		ITHAITS	115			Воти	Both SrMS	
Pavivei	Por, under 15	Male 14 m I up w urds	Age unspect	I otal M des	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	len de Age Adults 15 unspect nd up   fied	Age unspect	l and Children from the transfer as	Children under 15	Adults, 15 an l 1p wards	Age un epecificd	Crand Lot d
Cover uner t of Madra	5 83( 087	5 886 087 0 0 10 574 401 077	401077	1 40.74	5 76 5 831	816/2/4 12 826 612 51 151 160 151 15 216 282 13 646/268 18	151 051	15 719 585	8164249 11	18 ,(3,482	951231	1£y 0/1 18
Greenment of Bembers	3 10801	1 080 1 4 120 ( )		8 117 718	811718 3 65056 407710	400710		969 95n <i>L</i>	7 456 696 6 437,045	6 ) & Lic of		16 424 414
I tent Covernorship of Bengul	0 tr 622 tr	(10 521   50+ 16- or obs 622 ts	125 017	846 649 62 042 116 45 1 78 801 14 284 10 024 021 11 165 9 12	11 120 620	14 284 10	108 3/1	44 911 270	27 649 778	416, 702	101 2	رة تر زود
Lt Covernor-hip of the Puny 1b 4 428 578 6 274 "	3 924 578	0 274 " 4	~	10 210 )		3140, 536176	154	154 86 fn 384 7 t2 630	7 12 630	1160011	, 42 4	2 80147
Lt Covernorship of the North Western Provinces and Ough	8 735 281 14 177	14 177 74		27 012 690 7 (,1714 13 547 540	7 ( ,1 7.4	13 547 540		21 19 313 11 387 047	11 387 047	27 730 822		19,201 11
Chief Commannership of the	2,051 UPG	יבר צסף י פתט דצמנב	300		4 950 435 1 049 997 2 320 182	282 026 2	187	126 062 4	187 4 770 356 4 1003 996 1	5 834 508	387	3,838 791
Chief Commis tonership of North of rottoto I for 303	, 1 011 010	1 tot 303	91 330	5 04 Jrg		938 nost 1 343 17	8y 16	8y 16 - 377 723 1940 915	1 940 915	2 750 475	18107	4,89 476
Corum sconceship of 1 erar	51338	807,110		1 330 1)	1,77 406	7.14 (4.5		1 292 181	1 292 181 1 010 9,8	162 192 1		267273
Commissionership of Amere,	89 033 1	114 951		248 944	75 472	115461		211 878	164 502	206,317		4 ~ 723
Commissionership of Coorg	3,086	C) 45		100 433	28 911	48 952 1	-,	77,863	59 897	118 4-5		178 372
Chief Com of Bitti h Burnii	176,830	776,830 1 214 11,		1 11 005	734 526	734 526 1 011 240		174576	1745766 1 311,416	2 355	4-888	3,- 45 -71
Fora	40 625 396	61 507,578	717 905	102 850 879	37,439 529	00 933 982	648,17	99 038 018	79 064 925	40 625 396 61 507,578 717 405 102 850 879 37,439 599 00 939 982 6cR 3 17 99 038 018 79 064 925 122 117 364 2 176 412	2 346 412	201 883 897

I Including Native States superintended directly by the Bongal Proxincial Covernment

APPENDIA V -Polleation of British India, classified accurding to Religion, in 1881 (Compiled from the I ables of the Imperial Census Report)

Total of all	31 170 631	16,454,414	69 536 86r	1 184 18,850,437	44,107,869	162'88'6	4,581,426	2,672 673	460 722	178,302	3 736 771	692 38,463 201 888 897
Unspecified and Others	1499	365	35 404	I 183		2						38,463
Kumbhipathirs						269						
Втяртов	132		788		9	7	177				37	1,147
Jews	30	7 952	1,050		101	63		æ	2		204	9,506
Pársis	143	72,c65	156	462	114	399		242	75	22	83	73,760
N <sub>at</sub> Worshippers											143,581	143,581
Kabirpanthis						294474						358 161 294,474
Satinámis						19 715 358,161 294 474						358 161
Sms	24,973	216 224	1,609	35 826	79 957	45 718	1,58	20 020	24 JC 9	6	N)	448 897
Silhs		127,100 216 224	549	33,420 1,121,004	3,644	- 26	14	ν v	182			1,253,115
Christians	711 080	138,317	128,135	33,420	47,664	11 949	7,093	I,3 35	2,225	3 152	84 219	1,168,589
Buddhists	153		155 8oc	2,864	OI.	17	6,562	-			3,251 584	3 418 476
Aborrginal Tribes		562 678				1 533 599	488 251	37 3 38				4 677 688
MuhammadaM	1,933 561	3 021,131	21,704 724	10 525,150	5 922 884	275 77 3	1 317 022	187 555	57 Brs	12 541	168 881	45,127,033
submH	28,497,678 1,933 561	12,308 582 3 021,131	45 452,806 21,704 724 2 055 822	7,130 528,10 525,150	38,053 .94 5 922 886	7 317,830	3 062,148	2 425 554	376 029	162 489	88,177	144.875 315 45,127,033 4 677 688 3 418 476 1,168,589 1,253,115 448 897
Provinces	Covernment of Madras,	Government of Bombay,	Lieutenant Governorship oi)	Lieuten int Covernorship of the Punjah,	Lieutenant Governorship of the North Western Provinces Chief Commissionership of Oudh	Chief Commissionership of the	Chief Commissionership of Assam	Commissionership of Berar	Commissionership of Ajmere,	Commissionership of Coorg,	Chief Commissionership of	TOTAL POR BRITISH INDIA,

1 Including Native States superintended directly by the Bengal Provincial Government.

APPENDIX VII - NON YSIALIC POPULATION OF BITTISH INDIA CLISSIFIED ACCORDING TO BIRTH LIACE, IN 1881

(Compiled from the Tibles of the Importal Cinsus Refort)

u	rher Furoper Countries, and batheschied					541				_		142
	Luthey in Feron	9	30 250	15	89						13	352
۱	bart/erland	35	30	H	-0	H	ŀ	-			0 j	8
	рмецеп	1.28	131	4	н	∞	н			ĺ	118	336
-	ared	0.0	8	4	- 00						P I	78
	Kussia	8 4	4	H	12						90	198
_	Коитля		24									30 24
-	Prussia	13		τ.	9							
-	Portugal	20.00	23	<u> </u>		אי	н .		00		7	133
	Lorway	10 3	82			H	н				560	357
	Malta	15	22	<b>®</b>	10		н				35	50
	Italy	2.50	158	∞	4	6	CI.		9	C(	388	745
i	Polian Isles	4										14
1	l cel md	<u> </u>		- 23	<u> </u>							1 80
	Holland	1 6	27	4		- 6					21	8
	Oreece	4 64	19		~~~~ 28						19	195
1	டுள்ள சம்	st i	306	73	64	עע	ער	ო	9	10	337	1149
1	k ance	382	216	42	8	24	8		4	8	Š.	10
	Denmark	26	49	. 0			H				44	1 1
	Belgrum	50	23		н		3	1	H		12	170
	१,११४ ११३	1		н			-					0
	Zustria.	13	133	ς ∞	7						r.	294
١	rileritenA	33	113	H	3	្ត	14		m	H	18	355
	Тиспса	142	407	8	105	30	92	9	6	CI	143	1331
	raniA	746	315	8,	183	9	•	ī,	4	н	81	3122
	United Kingdom	5 883	10 483	17 590	20 184	2 774	795	26	872	134	976 2	78 030
	Provinces	Government of Madras,	I reutenant Governorship	Lieutenant Governorship of the Punjab	Lieutenant Governorship of the North Western	Chief Commissionership	Chief - Commissionership of Assum	Commissionersh p of Berar	Commissionership of Aj mere	Commissionership of	Chief - Commissionership	Of Dillian During,

Grand total non Assatic population of British Indra, 88,783 This table is reproduced from the Imperial Census Report But by comparing in with other materials, it evidently leaves a considerable number of the non Asiatic population of India unrecounted for (probably the British troops) with other materials, it evidently leaves a considerable number of the non Asiatic population of India of 142 612 India of 142 612

# APPENDIX VIII —LIST OF THE 149 TOWNS IN BRITISH INDIA OF WHICH THE POPULATION ENCEDS 20,000, IN 1801

(Compiled from the Table in the Imperial Census Report)

2   Bombay City and Island,   Bombay,   Bombay City and Island,   Bombay,   Bombay,   Galcutta Suburban,   Bengal,   Bengal,   Galcutta Suburban,   Bengal,   Bengal,   Galcutta Suburban,   Bengal,   Bengal,   Galcutta Suburban,   Galcutta and s	(Computed ) You I.	ie I abie in the Impera		15
2   Calcutta City   Bengal,   Bengal,   Bengal,   South Suburban,   Calcutta Suburban,   Ca	Name of Town	Province	DISTRICT	POIULATION
Calcutta Suburba,   Bengal   24 Parganés   251,439   684,658   766,238   7	1 Bombay City and Island,	Вошьлу,		773,196
South Suburban,   Dengal   24 Parganás   29 98				
Grand total of Calcutta and suburbs  6 Madras City Lucknow, 8 Benares, 10 Pownes, 11 Agra 12 Bangalore 13 Amrisar 14 Cawapur, 15 Alhahabid 16 Milahabid 17 Milahabid 18 Angoon, 19 British burma 19 Abadashad 19 Danish 10 Alhahabid 10 W Provinces, 10 Alhahabid 10 W Provinces, 11 Alhore, 12 Bangolore 13 Aurisar 14 Cawapur, 15 Alhahabid 16 W Provinces, 16 Allahabid 17 W Provinces, 17 Rangoon, 18 British burma 19 Abadashad 19 Danish 10 Alhahabid 10 W Provinces, 19 Alhahabid 10 W Provinces, 10 Alhahabid 10 W Provinces, 11 Alhore, 12 Barelly (Bareli) 13 Alwashidad 14 W Provinces, 15 Agra 16 W Provinces 16 W Provinces 17 Central Province 18 Agra 19 Body 19 Albabpur 19 Dacca, 19 British burma 10 Alhahabid 19 Pownes 10 Alhahabid 19 Pownes 10 Alhahabid 19 Pownes 10 Alhahabid 19 Pownes 10 Alhahabid 19 Alhahabid 10 Alhahabid 1	Total,			684,658
Madras City   Lucknow,   Senares,   Oudh,   Country   Delhi,   Popinces,   Delhi,   Popinces,   Delhi   173,303   Patha,   I engal   Lingal   Lin		Bengal bengal	24 Parganás 24 Parganas	51,658 29 982
Tucknow,   Senares,   Oudh,   Senares,   S	Grand total of Calcutta and suburbs	-		766,298
Benares		Madras	1	405 848
Delhi	7 Lucknow, 8 Renarcs.	W Provinces.		
Tagra   Tagr	o Delha,	Punjab	Delhi	173,393
12   Bangalore   13   Mysore,   13   Amritsar   15   86     13   Amritsar   19   86     14   Cawnpur,	ro Patna,	I engal		170,054
13 Amnisar   1,10 a	II Agra	Viscore.	Bangalore	155 857
15 Allahadid	r: Amriisar	Punjab,		<sup>1</sup> 151896
15 Allahadid	14. Cawnpur.	W Provinces,		151 444
134   170   134   170   134   170   134   170   134   170   134   170   134   170   134   170   134   170   134   170   134	15 Lahore,	runjad	l ahore	149,509
128   Poona   129   751     127   Surat   127   511     28   Poona   127   511     29   Barrelly (Bareli)   127   511     21   Surat   127   511     22   Howard   127   511     23   Meerut   127   511     24   Howard   127   520     25   Magpur, 127   127   127     27   Trichinopoli   127   127     27   Peshawar, 127   127   127     29   Dacca, 227   Penjab   Peshawar, 127     29   Dacca, 231   Penjab   Peshawar, 127     20   Dacca, 321   Penjab   Peshawar, 127     21   Dacca, 321   Penjab   Peshawar, 127     22   Dacca, 331   Madura   Madura   Madura   Madura   Madura     23   Madura   Madura   Madura   Madura     24   Magapipur   Penjab   Penjab     25   Moradabad   Punjab   Punjab   Punjab     26   Moradabad   Punjab   Punjab     27   Shabapur   Punjab   Punjab     28   Moradabad   Punjab   Punjab     29   Shabapur   Punjab   Punjab     20   Shabapur   Punjab   Punjab     21   Saha ampur   Punjab   Punjab     22   Sorakhpur, 128   Punjab     23   Moradabad   Punjab   Punjab     24   Shabapur   Punjab   Punjab     25   Sahapur   Punjab   Punjab     26   Safakpur   Punjab   Punjab     27   Safa   Punjab   Punjab     28   Safakpur   Punjab   Punjab     29   Safa   Punjab   Punjab   Punjab     20   Safa   Punjab   Punjab   Punjab     27   Safa   Punjab   Punjab   Punjab     28   Negapatam, 128   Punjab   Punjab   Punjab     29   Maduman, 128   Punjab   Punjab   Punjab     20   Safa   Punjab   Punjab   Punjab   Punjab   Punjab     20   Safa   Punjab   Pun	To Rangoon		Kangoon	134 176
26 Barelly (Barell) 27 Surat 28 Unorat 29 Howrah 21 Howrah 21 Howrah 22 Howrah 23 Meerut 24 Howrah 3 Meerut 25 Vargur, 26 Trichinopoli 26 Peshawar, 27 Panca, 28 Bengal 29 Dacca, 29 Bengal 29 Dacca, 30 Shahyaha pur 30 Shahyaha pur 31 Wadura 32 Karfachi, 33 Multan 34 Wadura 35 Mangalpur 36 Karfachi, 36 Multan 37 Wadura 38 Hengal 39 Hengal 30 Hengal 30 Multan 31 Watura 32 Karfachi, 33 Multan 34 Hengalpur 35 Hengal 36 Hengal 37 Darbhanca 38 Hengal 39 Moradabad 40 W Province 40 Variabad 40 W Province 40 Variabad 41 Variabad 42 Gorakhpur, 43 Calceut 44 Wirzapur 45 Shaha anpur 46 Gorakhpur, 47 Tanjore, 48 Mengaly 48 Hengal, 49 Polyab 49 Monghyr 40 Hengal, 40 Monghyr 41 Shahar 41 Shahar 42 Gorakhpur, 43 Madra 44 Wirzapur 45 Madra 46 Monghyr 47 Tanjore, 48 Mengalan 49 Hengal, 40 Monghyr 40 Hengal, 40 Monghyr 41 Shahar 42 Ferral Madra 43 Moradabad 44 Wirzapur 45 Madras, 46 Monghyr 47 Tanjore, 48 Mengalan 40 Monghyr 49 Bellary 40 Madras, 40 Monghyr 40 Multan 40 Monghyr 41 Shahar 42 Madras, 43 Multan 44 Warda 45 Multan 46 Monghyr 47 Tanjore, 48 Mengalan 49 Multan 40 Multa	18 Poona,	Bombay	Poona,	129 751
21 Surat   Bombay   Surat   109,044     22 Howrah   Longal   Howrah   105 300     32 Megrut   W Provinces   Megrut, 98 299     4 Sappur,   Central Province   Nappur, 98 299     2- Trichinopoli   Midris   Hichinopoli   84 449     2- Peshawar,   Punjab   Peshawar   79,982     2- Dacea,   Bengal   Uacca   71,076     30 Shahjaha pur   W Provinces   Sabalpur   77,705     30 Shahjaha pur   W Provinces   Sabalpur   77,705     31 Madura   Wacras   W High in jur, 77,705     33 Multan   Punjab   Multun, 106 67,43     34 Multan   Punjab   Hengal   Hagalpur   65,428     37 Darbanca   Hengal   Hagalpur   65,428     38 Multan   Punjab   Hengal   Hagalpur   65,428     39 Moradabad   W Province   W		Londy	1 Ahmadab id	127 651
22   Howrah	20 Bareilly (Bareli)	Provinces	Surat	112 417
Nerut	21 Jurat 22 Howrah	Lingal	Howrah	105 206
24 Algpur,   Central Province   Nagpur,   98 299   25 Trichinopoli   Vidris   Iuchinopoli   8 4 449   26 Peshawar,   Punjab   Peshawar,   79 982   27 Dacca,   Bengal   Dacca   70 045   28 Jabalpur   Central Provinces   Iabalpur   75 705   30 Sh.hjahá ipur   W Pict nees   Shithich unjur,   74 830   31 Wadura   Vadiras   Vadira   73 807   32 Karáchi,   Sind   Kirichi,   73 60   33 Multan   Punjab   Multin,   08 674   34 Bhagalpur   Lengal   Ingalpur   65,238   35 Ambila   Punjab   Ambila   67,463   36 Moradabad   W Province   Worldhama,   65 935   37 Farukhabad   V Province   Worldhama,   61 730   38 Farukhabad   W Province   Vigarh   61,281   39 Moradabad   W Province   Vigarh   61,281   40 Algarh)   W Province   Sholiquir   61,281   41 Saha anpur   W Province   Sholiquir   57 942   42 Gorakhpur,   W Province   Corakhpur,   57 942   43 Caheut   Vadira   Malabar   57,382   44 Mirzapur   W Province   Mirzapur   501,38   45 Monghyt   Bengal,   Monghyt   55 772   47 Tanjore,   Mauras   Tanjore   1175   48 Negapatam,   Madras   Tanjore   1175   49 Bellary   Madras   Tanjore   1175   40 Moulman,   Punjab   Nadras   12 per,   35 45   40 Maulman,   Punjab   Nadras   12 per,   35 40   41 Jahar   Punjab   Nadras   12 per,   35 40   42 Jahampu,   Madras   12 per,   35 40   43 Lahampu,   Madras   12 per,   35 40   44 Madrabad,   Madras   12 per,   35 40   45 Maulman,   11 tish Burma   Maulman,   53 107   46 Maulman,   Punjab   Nadras   12 per,   35 40   47 Madrabad,   Madras   Madras   12 per,   35 40   48 Negapatam,   Madras   12 per,   35 40   49 Mutra,   Punjab   Nadras   12 per,   35 40   40 Mutra,   Punjab   Nadras   12 per,   35 40   41 Jahahar   41 penjab   12 p	23 Meerut	\ W Provinces	Meerut,	99 565
20 Peshawar,   Punjab   Peshawar,   79 982   20 Dacca,   Bengal   Dacca   70 076   21 Jabahpur   Central Provinces   Shidhjahfaipur   72 705   22 Sabahjahfaipur   Welvances   Widura   73 807   23 Madura   Wadura   Wadura   73 807   24 Ehagalpur   Lengal   Lingalpur   05 73 807   25 Arafichi, Sind   Kurchi,   73 807   26 Ambila   Punjab   Wiltim,   04 674   27 Hangalpur   Lengal   Lingalpur   05 935   28 Arathatoad   Welvance   Wervince   Muraliud   67 387   29 Ambila   Punjab   Ambila   77,463   20 Ambila   Punjab   Ambila   77,463   21 Moradabad   Welvance   Wervince   Arukhitac   Central Province   25 Farathatoad   Welvance   Wervince   Arukhitac   Central Province   26 Ambila   Punjab   Muraliud   67 387   27 Handradad   Welvance   Welvance   Algarh   61 730   28 Ambila   Ambila   Punjab   Muraliud   79,463   29 Ambila   Punjab   Muraliud   79,463   20 Ambila   Punjab   Muraliud   79,463   21 Ambila   Punjab   Muraliud   79,463   22 Ambila   Punjab   Muraliud   79,463   23 Ambila   Punjab   Muraliud   79,463   24 Corakhpur   Welvance   Welvance   Central Province   25 Ambila   Punjab   Muraliud   79,463   26 Ambila   Punjab   Muraliud   79,463   27 Tanjore   Mauras   Tanjore   51,768   28 Negapatam   Madras   Tanjore   51,758   29 Ambila   Punjab   Muraliuman   51 tor   20 Ambila   Punjab   Muraliuman   51 tor   20 Ambila   Punjab   Muraliuman   51 tor   20 Ambila   Punjab   Muraliuman   51 tor   21 Ambila   Punjab   Muraliuman   51 tor   22 Ambila   Punjab   Muraliuman   52 tor   23 Ambila   Punjab   Muraliuman   79,463   24 Ambila   Punjab   Muraliuman   79,463   25 Ambila   Punjab   Muraliuman   79,463   26 Ambila   Punjab   Muraliuman   79,463   27 Ambila   Punjab   Muraliuman   79,463   28 Ambila   Punjab   Muraliuman   79,463   29 Ambila   Punjab	24 Nagpur.	Central Province	agpur,	98 299
2- Da.ca,	2- Irichinopoli		Peshawar.	1 70 082
Ben_al	2- Dacca.		Daces	71076
Madura	-b Gavi	Ben-al	(aya	70 415
Madura	29 Jabalpur	Central Provinces	labalpur	75 705
22   Karáchi,   73   560		Wadras Vacinas	Maura	5 7₹807
Bhagalpur	22 Karáchi,	Sind	Karacha,	73 260
Ambula   Punjab   Ambula   67,463     Moradabad   W Province   Moralabid   67,387     Darbhanca   Farukhatuad   W Province   Darbhanga   62,955     Farukhatuad   W Province   Farukhatuad   67,387     Kon (Aligarh)   W Province   Farukhatuad   67,387     Sahdapur   Bormad   Sholopur   61,287     Gahcut   Madra   Sholopur   61,287     Gabcut   Madra   Malabar   57,385     Mirzapur   W Province   Carlefi ur, 57,942     Mirzapur   W Province   Marapur   50,378     Faizabad   Oudh   Farit do   55,570     Faizabad   Oudh   Farit do   55,570     Monghy   Bengal   Monghy   55,727     Tanjore   Madras   Tanjore   51,745     Monghy   Madras   Tanjore   51,745     Malmain   Madras   Lellary   33 400     Malmain   Madras   Lellary   34 400     Madras   Madras   Lellary   34 400     Madras   Madras   Madras   Lellary   34 400     Mutra   Madras   Madras   Malabar   54 775     Mutra   Mutra   Malabar   57,385     Mutra   Madras   Madras   Malabar   57,385     Mutra   Madras   Madras   Lellary   50,067     Mutra   Madras   Madras   Malabar   57,385     Mutra   Madras   Madras   Malabar   57,385     Mutra   Mutra   Malabar   57,385     Mutra   Madras   Madras   Lellary   50,067     Mutra   Madras   Madras   Madras   Madras   Madras     Mutra   Madras   Madras   Madras   Madras   50,067     Mutra   Madras   Madras   50,067     Mutra   Madras   57,385     Madras   Madras   57,385     Mutra   Madras   57,385     Madras   Mutra   57,385     Madras   Madras   57,385     Mutra   Malabar   57,385     Madras   Madras   57,385     Madras   Madras   57,385     Madras			Mulein,	1 68 674
Moradabad   N. Province   Moralbad   67,387     Tarukhatad   N. Province   Noralbang   6,955     Farukhatad   N. Province   Augath that   6,2437     Kon (Aligarh)   N. Frovince   Aligarh   6,730     Sholapur   Bornhad   N. Province   Aligarh   6,738     Gorakhpur   N. Province   Corakhpur   59,794     Gorakhpur   N. Province   Corakhpur   59,794     Gorakhpur   N. Province   Corakhpur   59,794     Gorakhpur   N. Province   Corakhpur   57,385     Mirzapur   N. W. Province   Malabar   57,385     Mirzapur   N. W. Province   Mirzapur   50,338     Farabad   Oudh   Marzapur   50,338     Malabar   Sind   Marzapur   50,338     Farabad   Oudh   Marzapur   50,338     Malabar   Oudh   Marzapur   50,348     Malabar   Oudh   Oudh   Oudh   Oudh     Farabad   Oudh   Oudh   Oudh     Farabad   Oudh   Oudh   Oudh   Oudh     Farabad   Oudh   Oudh   Oudh	A 1-	, rengal	Ambula	67.462
Darbhanga		N Province	Moralibid	67 387
Non (Aligarh)   Non Fronties   Aligarh   61 730	37 Darbhanga	l engal	Durbhang (	55 955
1	s Farukitabad Von (Abgarh)	W Provinces	f drukh ibac ,	61 230
Saha anpur			Shol pur	61,281
Variable	41 Saha anpur	W Province	Sthar nour	59 194
Mirzapur	42 Gorakhpur,	W Provinces	Corakhi ur.	57 942
Faizabdd   Ondh	43 Cancut	Viagra		57, 307 50.1.8
46 Monghyr 47 Tanjore, Mauras Janjore 51745 48 Negapatam, Madras, Janjore 51745 49 Bellary Madras, Janjore 51745 50 Maulmain, Jutish Burma Manlmain, 53 to7 51 Ráwal Pindi Punjab Rawal Jindi, 573975 52 Jalandhar Punjab, Julandhar 53,119 53 Chapra Pengal Gurui, 51 570 54 Khampti, Central Provinces, Magpur, 50 687 55 Salem, Maoras, Jellan 50,667 67 Tehar Bengal Jutin 43,908 68 Jalandhar Sind Julian, Ajnore 45,775 69 Muttra, WProvinces Muttra, 47 483 61 Salkot Punjab Sulkot, 47,772 62 Sagar (Saugor) Central Provinces Sulkot, 47,772 63 Judhana, Punjab Judhúna, 44 16 64 Jaunpur Madras, South Aroxt, 45,545 65 Jarah Pengal Ludhúna, 44 16 65 Jaunpur Madras, South Aroxt, 45,545 66 Jaunpur Madras, South Aroxt, 45,545 67 Shikarpur Sind Sink opur, 42,496 68 Muzafarpur, Jengal Muzafarpur, 44,666 69 Muzafarpur, Jengal Muzafarpur, 44,666 60 Muzafarpur, Jengal Muzafarpur, 44,666	45 Faizabád	Oudh	Lanz tricd	55 570
Bellary   Madras   Dellary   33 460	46 Monghyr	Hengal,	Mongher	25 172
Bellary   Madras   Dellary   33 460	e7 Tanjore,		lanjore	51 745
Maulmann		Madras	Lellary	33 460
Jalandhar	5c Maulmain,		Manimam,	53 107
A	51 Kāwal Pindi	l'unjab Punjab	Kawai i mdi,	57,975
A	32 Jalanghar Channa	Pengal	's trainingr	54,419
Salem,   Madra's   Selem   So,907	A hamuu.	Central Provinces,	Nagpur,	50 487
1	Salem,	Magras,	~ tieni	50,067
Ajmere   Ajputána,   Ajnote   45 775			l'angore l'an	20,008
Hadarabad,	Aimere	Kajoutána.	Amatie	1 45 775
Muttra,   V Provinces   Muttra,   47 483	49 Haidarabad,	\u00e4nd	Hai lar ib id	47 153
Cantral Provinces   Signr   44 410	/ Muttra.	W Provinces		47 483
63 I udhana, Punjab I udhifia, 44 173 e4 Cuddalore, Madras, South Arcot, 45,545 e5 Arrah Pengal Shah dad, 42 998 e6 Jaunpur W Provinces Jaunpur, 42 845 e7 Cuttack, Pengal, Cuttack, 44 656 e8 Shikarpur Sind Shik opur, 42,496 e9 Muzafarpur, 1 engal Muzafarpur, 400 emploido 1. Cut.d. Mur hidde 1 12 24	. (2 Sagar (Sangor)	Central Provinces		44 416
64 Cuddalure, Madras, South Arcot, 45545 65 Arrah Pengal Shah thad, 42998 66 Jaunpur S W Provinces Jumpur, 42845 67 Cuttack, Pengal, Cuttack, 42656 68 Shikarpur Sind Sink orpur, 42496 69 Muzaffarpur, 1 engal Muzaffarpur, 400 60 Muzharpur, 1 engal Muzaffarpur, 400 60 Muzharpur, 1 engal Sink orpur, 4206 61 Muzaffarpur, 1 engal Sink orpur, 4206 62 Muzaffarpur, 1 engal Sink orpur, 4206 63 Muzaffarpur, 1 engal Sink orpur, 4206 64 Muzaffarpur, 1 engal Sink orpur, 4206 65 Muzaffarpur, 1 engal Sink orpur, 4206 66 Muzaffarpur, 1 engal Sink orpur, 4206 67 Muzaffarpur, 1 engal Sink orpur, 4206 68 Muzaffarpur, 1 engal Sink orpur, 4206 69 Muzaffarpur, 1 engal Sink orpur, 4206 69 Muzaffarpur, 1 engal Sink orpur, 4206 60 Muzaffarpur, 1 engal Sink orpur, 4206 61 Muzaffarpur, 1 engal Sink orpur, 4206 62 Muzaffarpur, 1 engal Sink orpur, 4206 63 Shik orpur, 4206 64 Muzaffarpur, 1 engal Sink orpur, 4206 65 Muzaffarpur, 1 engal Sink orpur, 4206 66 Muzaffarpur, 1 engal Sink orpur, 4206 67 Muzaffarpur, 1 engal Sink orpur, 4206 68 Shik orpur, 4206 69 Shik orpur, 4206 69 Shik orpur, 4206 60 Muzaffarpur, 1 engal Sink orpur, 4206 60 Muzaffarpur, 1 engal Sink orpur, 4206 60 Muzaffarpur, 1 engal Sink orpur, 4206 61 Muzaffarpur, 1 engal Sink orpur, 4206 62 Muzaffarpur, 1 engal Sink orpur, 4206 63 Shik orpur, 4206 64 Muzaffarpur, 1 engal Sink orpur, 4206 65 Muzaffarpur, 1 engal Sink orpur, 4206 66 Muzaffarpur, 1 engal Sink orpur, 4206 67 Muzaffarpur, 1 engal Sink orpur, 4206 68 Shik orpur, 4206 69 Muzaffarpur, 1 engal Sink orpur, 4206 69 Muzaffarpur, 1 engal Sink orpur, 4206 69 Muzaffarpur, 1 engal Sink orpur, 4206 60 Muzaffarpur, 1 engal Sink orpur, 4206 60 Muzaffarpur, 1 engal Sink orpur, 4206 61 Muzaffarpur, 1 engal Sink orpur, 4206 62 Muzaffarpur, 1 engal Sink orpur, 4206 63 Shik orpur, 4206 64 Muzaffarpur, 4206 65 Muzaffarpur, 4206 66 Muzaffarpur, 4206 67 Muzaffarpur, 4206 68 Muzaffarpur, 4206 68 Muzaffarpur, 4206 69 Muzaffarpur, 4206 69 Muzaffarpur, 4206 69 Muzaffarpur, 4206	63 Iudhiana,	Puntab	I udhrina.	44 1(3
1 65 Arrah Pengal 71 11 11 11 11 11 11 11 11 11 11 11 11	. ea Cumante.	Madras.	South Arcot,	4 5,545
69 Cuttack, Pengal, Cuttack, 42 050 69 Shikarpur Sind Shikarpur, 44496 69 Muzaffarpur, 1 engal Muzaffarpur, 4 400 20 Murshigab I. 1 cheat. Murshigab 1 12 231	os Arrah	rengal	andn wad,	1 42 996
69 Shikarpur Sind Sink opur, 42,496 69 Muzafarpur, 1 engal Muzafarpur, 4 400 20 Muzharbudh I chiad. Mur hidib i 1221	57 Cuttack.	Pengal.	Cuttack,	1 42 656
og Murchigaled. I (med). Mur hiddeld 1934	55 Sinkardur	Sind	Smk croue.	42,496
70 Minimized 1, 1 (19.4), Mari materi (1941) 71 Filozpar, Purj t, Firozpar, 33,570	69 Muzaffarpur,		nuzanarpur,	
Combitore 18467	70 ministrato 11,	Purt.	Firozour.	7 1.570
	in continut	1777	Cembuore	38 467

LIST OF 149 TOWNS IN BRITISH INDIA OF WHICH THE POPULATION EXCEEDS 20,000-continued.

Name of Town	PROVINCE	DISTRICT	POPULATION
74 Ahmadnagar, 75 Vellore	Bombay,	Ahmadnagar,	37,492
75 Vellore 76 Broach	Madras,	North Arcot,	37,491
76 Broach	Bombay,	Broach,	37,281
77 Conjevaram, 78 Hubli,	Madras,	Chengalpat, Dharwar,	37,275 36,677
70 Hubii,	Bombay, Madras	Malabar,	36 339
79 Pálghát, 80 Amroha,	N W Provinces	Moradábád,	1 25.145
8r Randar (Masulmatam)	Madras.	Kistna,	35,056
81 Bandar (Masulipatam) 82 Etawah,	Madras, N W Provinces	Etawah,	1 34 724
82 Randonán	Bengal	Bardwan,	34,080
84 Akvab	British Burma	Akyab,	33,989
85 Bhiwani,	Punjab, N W Provinces	Husár,	
	N W Provinces	Budaun,	33,680 33,560
87 Midnapur	Bengal, N W Provinces,	Midnapur Ghizipur,	32,885
88 Gházipur,	Bombay,	Relation.	32,697
89 Belgaum,	Madras	Belgáum, S Kanara	34,099
90 Mangalore 91 Hugli and Chinsura,	Bengal	Hugli, 24 Parganas, Vizagapatam,	31 177
92 Agarpará	Dangel	24 Parganas,	30,317
92 Agarpará 93 Vizagapatam		Vizagapatam,	30 291
94 Burhanpur,	Central Provinces,	i inimar,	30,017
95 Pilibhit,	Central Provinces, N W Provinces	Publit,	29 721 29 687
96 Sántipur	Bengal,	Nadiyá, Satára,	29 028
97 Satára, 98 Bandá	Bengal, Bombay, N W Provinces,	Banda	28 074
98 Bandá	Madras	Godavari	28 974 28,856
99 Coconada	Beerch Purms	Prome,	28,813
100 Prome, 101 Nadiád,	Bombay	Kaira,	28 304
101 Natiad, 102 Bassein	British Burma	Bassein.	28,147
103 Chandausi	N W Provinces.	Moradábad,	27 581
104 Nellore	Madras,	Nellore	27,505
105 Krishnagar	Bengal	Nadiyá,	27,477
106 Sukkur, 107 Dhárwár	Sind	Shikarpur	27,389
107 Dhárwár	Bombay	Dharwar, Bulandshahr,	27 191 27,190
ro8 Khurjá,	N W Provinces	Nasik	27,070
100 Nasik	Bombay	Ellichpur,	26 728
110 Ellichpur	Berar, Madras	Malabar,	26,410
111 Tellicherri	Madeac	Malabar,	26,386
112 Cannanore	N W Provinces	Aligarh,	25 656
113. Hathras,	Bengal.	Hugh,	25 559
114 Serampur 115 Ellore	Bengal, Madras	Godávari,	25 092
116 Hajipur,	Bengal	Muzaffarpur	25,078
117 Panipat	Puniao.	Karnál,	25 022
TYR RAINIT	Central Provuices	Ráipur	24,948
119 Rajahmahendri (Rajahmundr	)   Madras	Godavarı, Gurdaspur	24,555 24,28£
120 Batala,	Punjab	Gurgaon	23 972
121 Rewart	Punjab	Murshidabid	23 60
122 Berhampur,	Bengal Madras	Ganj im	2, 599
123 Berhampur	Berár	Amráott.	23,550
124 Amráoti 12. Linnevelli,	Madras	Tinnevelli,	23,221
12. linnevelli,		Karnál,	23 13
107 Mayayaram.	Madras,	l'anjore,	23 04/ 22,88
128 Gujranwala	Madras, Punjab	Gujranwala,	
too Vizianágaram		l izagapatam,	22,57 22 44
rao Adom		D (- hhan	22,30
131 Dera Cházi Khán 132 Dera Ismul Khan,	Punjab, Punjab, N W Provinces, Bengal, Bengal	Bellary, D G Khan, D I Khan	22 16
	V W Drox mose	Saharanpur,	22 16 22,11
1,3 Deoband,	Rengal.	Port	22,09
134 Puri	Bengal	24 Parganis, Muttra, Moradibid	21,53
130 Nathati, 130 Brindibun	Bengal N W Provinces N W Provinces	Muttra,	21,46
	N W Provinces	Moradab id	21,37
1 18 Hoshiarpur,		Hoshiarpur	21 36
Lan Hatchnut	N W Provinces	Fatehpur,	21 32
140. Nasırabıd	lymere,	Ajmere, Champaran,	21,32
147 Beltian	Hengal	Lublam	01 10
Jan Jehlam (Jhelum),	Ajmere, Hengal Punjab bengal	Jehlam, Pabná	21 0
14: Siraigan),	Bengal	Chittagong	20 9
144 Chittagong,	N w Provinces,	Bynaur,	20 5
	Madras		20,3
140 Karnul (Kurnool),	Bengal	Rilasor	( 20,20
147 Balasor,	N W Provinces,	Mampuri,	20 2
148 Mainpuri,	Madras,	S Arcot,	20 1
149 Faurous	•	•	
Population of 56 town, with above	re 50 000 inhabitants		6 391,8
Population of 93 towns between	20 000 and 30 000,		2,794,9
			9 380 7
Lutal population of 149 largest to			

APENDIN IN PULLIATION OF BRITISH INDIA CLASSIFIED ACCORDING TO PUCATION IN 1881

(Compiled from the Talle in the Imperial Census Report)

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			An Kith ton	¥01 ,					HIMDL S	5.		
	-	Nak	1		I male			M ile		! !	Female	
Prounces	l nder In stuetpou	Able to Re ud and Wate but not under	I ot il M ile. P ipul ticon	l ndet Instruc non	Wite fut Wite fut More fut not muder Instruc	lotal I cm uk Popul uron	Under In	Able to Read and Wrate, but not under Instruc	letal Male Hindus	Under Instruc tion	Able to Read and Write but not under Instruc	Total Female Hindus
Government of Madi 15	4108-3 1	1 545 700	15 to 13	30 rot	165 10	01 571 15 710 538	110 031	1 998 898 1 1 363 898	14 104 951	22 113	65 536	14 392,727
of Bombro	271 409	672 895	8 147 718	051 81	32 648	2 956 696	199765	485 851	6 291 598	6 331	6 937	6 016 984
I teut Coremoish ip of Bengul	1 000 1 10	1 50 583	1162 589 18	35 700	_	0/2 116 15 611 19	753 267	22 011 915 1	22 578 544	21,295	38 460	22 874,262
dring the Punta	157 (3)	46- 12)	10 210 053	6 101	8 107	18 (to 394	76 000	325 069	3 883 915	913	1 973	3 246 613
Western Provinces and Ough	200 -25	1 033 1.5	1955 516 57	122 6	21 500	21 105 313	432 055	879 182	19 813 098	3 298	10 874	10 874 18 240 296
	618 94	1,703	4 650 422	3 171	1 187	4 879 350	63 175	130 271	3 700 467	1,794	I 941	3 617 363
Chief-Commissionership of 1-sim	93 Et	1961	5 503 703	1 058	1 786	2 377 723	24 333	62 626	I 580 458	482	982	1 481 650
Commissionership of Peru	27 117	5-827	r 3%0 402	326	789	181 202 1	23 659	50 623	1 252 541	22I	<u>*</u> \$	1 173 113
of Amere	2 605	24 486	118812	57	\$2	211 878	3 427	14 131	302 226	98	450	173 803
of Coort	4 20	8 430	100 1.0	431	326	77 863	3 817	6 982	50 205	333	145	71 784
5	214 237	701 82,	1 991 005	31 056	31 7 10	1 745 766	1 369	15 300	73 529	227	365	14 248
	2 620 913	0 -45 502	102 930 8 9	145 5-3	2 <sub>2</sub> 8 48b	99 038 018 1 830 201 4 880,041 73 572,432	I 830 201	4 880,041	73 572,432	57 093	131 108	71 302 883

APPENDIX IX -Population of British India classified according to Education, in 1881-continued

1 emale   Abbe to but took the but took th	Muh umadans				CHRISTIANS	rians.		
Under   Read and   Lord Male   Under   Read and   Instruct   Read and   Instruct   Read and   Instruct   Ins		ıle		Male			Female	
42 656         110 897         952 388         4 353         8 121           36,477         71 889         1 612 154         3 526         4 586         1           244 158         415 666         10 855 771         8 241         11 747         10           68 551         95 816         5 639 845         3 224         2 399         4,           57 850         116,763         3 022 445         2 428         3 474         2           7,614         14 307         673 189         89         205         17           2 760         3 859         97 230         85         117         55           305         1,112         7 880         35         30         30           4 777         1 853         31 999         41         55           305         1,112         7 880         35         30           4 711         22 121         110731         1161         1094	l otrl Male Under Muhrm Instruc madans tion	-4-	Under Wr. Institute India In	Able to Read and Write, but not under Instruc tion	Total Male Chris tians	Under Instruc tion	Able to Read and Write but not under Instruc- it in	Total Female Chris- tians
36,477     71 889     1 612 154     3 526     4 586       24, 158     415 666     10 855 771     8 241     11 747     10       68 551     95 816     5 639 845     3 224     2 399     4,       57 850     116,763     3 022 445     2 428     3 474     2       7,614     14 307     673 189     89     205       2 760     3 859     97 230     85     117       305     1,112     7 883     31 999     41     55       3 853     1,112     7 880     330     30     30       4 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	952 388 4 353 8	1 981 173	27 020 5	9/1 /5	349 082	12 592	20 784	361 998
24, 158     415 666     10 855 771     8 241     11 747     10       68 551     95 816     5 639 845     3 224     2 399     4,       57 850     116,763     3 022 445     2 428     3 474     3       6 752     12 720     140 611     451     667       7,614     14 307     673 189     89     205       2 760     3 859     97 230     85     117       777     1 853     31 999     41     55       3 905     1,112     7 880     35     30       5 711     22 121     110731     1 161     1 094	1 612 154 3 526 4	i 1 408 177	7 723 2	23 943	91 190	3 909	6 935	57 127
68 551     95 816     5 639 845     3 224     2 399     4,       57 850     116,763     3 022 445     2 428     3 474     2       6 752     12 720     140 611     451     667       7,614     14 307     673 189     89     205       2 760     3 859     97 230     85     117       777     1 853     31 999     41     55       305     1,112     7 880     35     30       5 711     22 121     110731     1 161     1 094	10 855 771 8 241	10 848 953	7 498 2	20 149	67 715	5 295	10 322	60 420
57 850       116,763       3 022 445       2 428       3 474       2         6 752       12 720       140 611       451       667         7,614       14 307       673 189       89       205         2 760       3 859       97 230       85       117         777       1 853       31 999       41       55         305       1,112       7 880       35       30         5 711       22 121       110731       1 161       1 094	5 639 845 3 224 2	4,885 305	2,254 I	17 874	25 044	1 629	3 550	8 376
6 752         12 720         140 611         451         667           7,614         14 307         673 189         89         205           2 760         3 859         97 230         85         117           777         1 853         31 999         41         55           305         1,112         7 880         35         30           5 711         22 121         110731         1 161         1 094	3 022 445 2 428	64	5 632 1	19 988	31 208	3 958	7 030	16 456
7,614         14,307         673,189         89         205           2,760         3,859         97,230         85         117           777         1,853         31,999         41         55           305         1,112         7,880         35         30           5,711         22,124         1107,31         1167         1094	140 611 451	135 162	2/6	4 213	7 170	645	1,327	4 779
2 760     3 859     97 230     85     117       777     1 853     31 999     41     55       305     1,112     7 880     35     30       5 711     22 124     110 731     1 161     1 094	673 189 89		441	I 549	4 083	306	492	3 005
777         1 853         31 999         41         55           305         1,112         7 880         35         30           5 711         22 124         110 731         1161         1 094	97 230 85		82	424	772	38	182	563
305 1,112 7 880 35 30 5,711 22 121 110,731 1.161 1.094	31 999 41	25 810	154	oii i	1 551	901	329	674
5 711 22 121 110 731 1 161 1 094	7 880 35	4	441	216	1 775	62	<i>11</i> 11	1 377
	1 10731 1 161 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	58 150	9 360	17 024	46 419	2 951	5 212	37 800
473,611 867,003 23 144 243 23,634 32 495 21 982 790	23 144 243 23,634 32	1	58 176	164 166	616 014	31 491	56 340	552 575

APPI NDIN IN - Polliation of Bitish India ciashind according to Indiation, in 1881-continued

	,														_
			Total Female Sıkhs		59 487	245	481 544	868	38	0,	520	19		542 478	
		Female	Able to Read and Write, but not under Instruc		345	က	435	13			H	H		798	_
			Under Instruc tion		506	н	305	m						515	
ļ	SIRII	1	Total Male Sikhs		67 613	304	ogt 6Eg	2 776	29	w	305	115		710 637	
		Male	Able to Re id and Write, but not under Instruc		21 396	8.	35 976	818	8	N	53	33		58 394	-
1			Trader In struction		C 00,	8	9 139	283	4	H	ır	15		15 879	
		1	Total Fomale Jauddhists	671		77 2,1	1 505	42	7	2 700			1 565 321	35 063   1 647 500	<b>-</b> 1
;		l cm de	Not to Read and Wate, but not under Instruc			L 193			-	54 ]			24 816	·	1
	Beneficies		I nder Instruc tron	_		ક્					_		160 52	26 190	
1	Btm		Total Male Unddhists	198		78 155	واد و آ	19	10	3 863	Ħ		641,742 1 686 263	650 905 1,770 976 26 190	
,		Malc	Able to Re id and Write but not under Justine	230		5 17- 1	961	17	o	ናኔ,	<b>14</b>		644742	650 905	i
	_		I mier Instruc tron	38		I Cox	33	5	<b>-</b>	217			199 836	201 860	i
			Piwacis	Government of Withas	of Pont 10	I cut Covernorship of Pangal	of the lungth		te neal Provinces	the f (ommissioner hip of Neum	( omanssionership of Beist	" of Americ	of Coorg, ( half ( on missionersh p of Batish Burma		at the state of th

APPENDIY IX -- Popliation of British India, Classified according to Education, in 1881-continued

			JAINS	<b>s</b> o					Parsis	415		
		Male			Female			Male			Female	
Provinces	Under In	Able to Read and Write, but not under Instruc	Total Male Jams	Under Instruc tion	Able to Read and Write, but not under Instruc	Total Female Jams	Under Instruc tion		Able to Read and Total Male not under Instruc	Under Instruc- tion	Able to Read and Write but not under Instruc tion	Total Female Pársis
Government of Madras,	1 023	3 483	12,761	31	96	12 212	19	56	87	4	17	56
,, of Bombay	11 680	49 288	118 350	192	546	97,874	8 463	18 350	36 744	3 950	9 878	35 321
Gos es	138	216	1 174	O.	Ħ	435	82	75	117	7	R	39
of the Punjab	1 283	7 034	19 047	19	61	622 91	4	148	312	H	24	150
Z g	3 371	16 582	42,819	7,	172	37 138	H	8	88	က	II	98
Chief - Commissionership of the Central Provinces	2 007	6 809	23 570	190	104	22,148	35	177	265	ដ	47	134
Chief Commissionership of Assam	6	133	145			13						
Commissionership of Berar	821	2,749	10 752	9	2	9 268	22	92	157	9	36	85
of Ajmere	1 313	7 286	12846	8	114	11,462	н	37	SI	H	9	<b>5</b> 7
of Coorg	H	17	99			33	н	12	13	H	4	<b>60</b>
Chef Commissionership of British Burma		m	æ		61	a	7	34	56	က	∞	27
	21 646	94 100	241,533	109	1601	207 364	8,622	19 051	37 890	3 996	150 OZ	35 870

APPENDIX \ - Papellien of British India crashed according to Chal, Suce and Nationaldy in 1831

(i. mpile I fi m the Sables in the Pro incial Consus Reports)

1	1								1				
	!	אום וון		4	MURINADANS	DANS		CHI	Christians				
PR vivers	эигшц <del>ы</del> д	K ilpute	Politer Cyster	steung	shahs	Hahahie, Farane	Danspectfied	Natives	Eurasians	British Born and other Europeans	Abori Gival Tribes	Miscel Laneous 1	GRAND TOTAL
Vadias,	1 122 070	207 465	27,168 143	1 758 375	41.378	1,102	902 621	toc 195	21,892	125 184		28 312	31 170 631
Bomlnv	664 431	196 906	11 447 265	ty2 0t6 z	78 531	178	1 653	111,823	2 893	23 60I	562,678	423 706	16 454 414
' Bengal	2 754 100	1 409 354	41 289 352	20 564 657	262 293	7 7 7	475 630	86 306	14 705	27 124	2 055 822	195,374	69 536 861
Punjab	180 608	652 181	5 669 266	10 320 022	95 655	2 41 1	107 059	3 823	1,821	27 776		ı 161,339	18,850 437
N -W Provinces and Oudh	4 655 204	3 027 400	30 370 790	5 752 056	170 517	-82	275	13 255	7 726	26 683		83,925	44 107,869
Central Provinces	332 207	221 849	6 75,3 774	259 608	6 772	186	9 207	5 558	1,230	5 161 1	533 599	oty 669	9,838 791
Assam,	119 075	10 541	2 932 532	1 308 712	6 377	136°	593	5 462	1691		488,251	6 912	4,881 426
Berar,	65 754	46 148	2 313 752	185 686	1,36o	39	470	579	242	214	37 338	20 791	2,672,673
1, 1, mere,	22 388	15 876	337 765	57,262	547			799	961	1,230		24 659	460 722
Coorg	2,445	480	159 564	12 540	н			2,637	287	228		120	178 302
British Burma,			88 177	150 821	11 287	6†æ I	5 524	71 355	4 998	7,866		3 395,494	3 736 771
I OLAL FOR BRITISH INDIA,	ro 546 735	5 788 200	INDIA, 10 546 735 5 788 200 128 540 380 43 710,503 677 748	43 710,503	677 748	8,680	8,680 730 102	865 6or	57 921	245 067	245 067 4,677 688	6 040 272	201 888 897

<sup>1</sup> Includes Buddhists Jams Parsis Sin unis K infranthis lews, Brdhmos, etc proper at the figures given in this table, are compiled direct from the Provincial Census Reports. It will be observed that in regard to the Christian population, some of the figures differ from those given in previous tables from the Imperial Census Report. The difference probably arises from the "unspecified columns long in some cases included as Luropeans in the Provincial Census Reports. The total of Christians agrees with the special returns of Christians within British India compiled for chapter ix of this volume.



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Abars, an aboriginal tribe in Assam, 57 Aboriginal criminal tribes, 71, 72 Aboriginal tribes, non Aryan population, chap iii pp 53 74 Kistvaen builders, flint and bronze periods, 53, non Aryans of Vedic India, 53, 54 Anda man ıslanders, 55, Anamalıı hıllmen, 55, Gonds and aboriginal tribes of the Central Provinces, 55, 56, the Juangs or leaf wearers of Orissa, 56, tribes of the Himalayas, 56, of Assam, 57, Santals, their tribal government, his tory, religion, 57 60, the Kandhs of Orissa, their tribal government, blood revenge, marriage by capture, and human sacrifice, 60 63, origin of the non Aryan tribes, 63, the three non Aryan stocks-Tibeto Burman, Dra vidian, Kolarian, - their languages, 63 68, statistics of non Aryan races in 1872 and 1881, 69 71, Hinduizing tendency among aboriginal tribes, 70, 71, crushed aboriginal tribes, 71, gipsy clans, 71 aboriginal criminal tribes, 71, 72, the non Aryan hill tribes as soldiers, 72, Colonel Dixon's work among the Mhairs of Rajputana, 73, Sir James Outram's work among the Bhils, 73, fidelity of the hill races, 73

Abortgines of India, by Mr B H Hodg son, quoted, 340 (footnote 1)

Abu, Mount, in Rajputana, held sacred

by the Jams, 35, 159
Abul Fazl, Akhar's finance minister and historian and the author of the Ain 2 Albari, 300

Acta Sanctorum, The, of the Hindus,

Adams, Major, defeat of Mír Kásım by, at Gheriah and Udhanala, 386

Adams, Mr, acting Governor General (1823), 403

Adam's Peak in Ceylon, Shrine common VOL. VI

to Buddhism, Siva worship, and Mu hammadanısm, 203

Adıl Shahı, Muhammadan dynasty ın Southern India (1490 1636 AD), 288 Administration of British India—See British Administration

Adoption, Hindu practice of, 414, 415 Afghan dynasty of Delhi (1540 56 A D)

Afghanistan, History of, under the Duranis (1747 1826), 406, early Buttish dealings with (1800 37) 407 Afghan dynastic quarrels, 407 Russian intrigues, 407, installation of Shah Shuja, and occupation of Kabul by a Bittish force (1839), 407, 408 rising of the Afghan people, murder of the British envoy, and massacre of the British army on its retreat through the passes to India (1841 42), 408, the Butish army of retribution, 408, 409 Lord Ellenborough's proclamation, 409, second Afghan war (1878 81), 426, 427, murder of Sir L Cavagnari, the British Resident, 427, retributive occupation of Kabul, 427, Sir F Roberts' march from Kabul to Kan dahar, and defeat of Ayub Khan, 424, recognition of Abdurrahman Khán as Amir, 427, the Rawal Pindi daibai, 427, trade routes to Afghanistan, 586 value of Afghan trade, 586

Agastya, the Brahman Saint of Southern

India, Legend of, 329

Aghori, a carrion eating sect of Sivaite devotees, 214 Agni, the Vedic God of Fire, 80

Agra, capital of Akbar the Great, who built the fort, 294, Akbar's tomb at Sikandra near, 295, embassy of Sir Thomas Roe to the Empeior Jahangir, 301, 367, Shah Jahan's great architec tural works at the Tay Mahal and Moti Masjid, 304, deposition of Shah Jahan and imprisonment within Agra Fort (where he died), by his usurping son

Aurangzeb, 305, establishment of English factory at (1620 A D), 367

Agra Canal, 29, 532, 533 Agricultural Rehef Acts for Southern India, 449, 450

Agricultural school at Saidapet in Madras, 516

Agricultural stock in India, 519 523, famous breeds of cattle and horses, 520, 521

Agriculture and products, chap xvii pp 482 544 Agriculture in India, the occupation of almost the entire population, 482, 483, various systems of agriculture, 483, rotation of crops, petite culture, 483 484, statistics of rice cultivation in different Province-, 484 486 hill cultivation, 486, wheat, 486, area under principal food grains, 487, millets and minor cereals, 488, 489, pulses, 489 oil seeds, 489, regetables, fruits, and spices, 490 palms and sugar-cane, 491, cotton, 491 494 Jute, 494, 495, indigo, 495 498, opium, 408, 499, tobacco, 499, 500, uncertainty of Indian crop statistics, 500, approximate area under certain principal crops, 501, special crops, coffee, 502 504, tea, 504 509, cinchona, 509 511, slk, 511 514, lac and lac dve, 515, model farms, their small success 515, 516, the problem of improved husbandry, 517 the im pediments to better husbandry, namely want of cattle, want of manure, and want of water, 517 519, agricultural stock 519 523, forest conservancy and growth of the Indian Forest Depart ment, 522, 524, 527, nomadic cultiva tion, 527, 528, irrigation and its function in India during famine, 528, 529, irrigation areas in the different Provinces, 529 538, irrigation statistics for British India, 538, 539, famines and their causes, 539, 540, summary of Indian famines, 541, 542, the great famine in Southern India (1876 78), 542 544

Agriculture in India, small holdings, 62, al sence of large commercial towns,

Ahams, tribe in Assam, formerly the ruling race in that Province, now a crushed tribe, 71, present descendants of, 188

Ahi, the Vedic Demon of Drought, 81 and footnote

Alimailnagar, Muhammadan Kingdom of Southern India (1490 1636 A.D.), 288 Alimad Snah, Durani (1747 61 A.D.),

314, 315 Ain : Aklarl, or chronicles of Akhar, translated by Professor H Blochmann, 272 (footnote), 291 (footnote 1), 295 (footnotes)

Aix la Chapelle, Madras restored to the English by the treaty of (1748), 379 Ajmere, establishment of an English

factory at (1614 A D), 366

Akas, an aboriginal hill tribe in Assam,

Akbar the Great, founder of the Mughal Empire (1556 1605 AD), 291 300, chief events of his reign, 291 (footnote), his work in India, 292, 293, concilia tory policy towards the Hindus, 293, conquest of Rajput chiefs, and extension and consolidation of the Mughal Empire, 293, 294 change of capital from Delhi to Agra, 294, his religious faith, 295 army, judicial, and police reforms, 296, his revenue survey and land settlement of India, 297, 298, revenues of the Mughal Empire under

Akbar, 297 300 Alabaster, Mr., The Wheel of the Law,

quoted, 137 (footnote)

Ala ud din, the second King of the Khilji dynasty (1295 1315 AD), 281, his invasion and conquest of Southern India, 281, 282, massacre of Mughal settlers, 282 Hindu revolts, 282

Albuquerque, second Viceroy of Portu guese India (1509 AD), 359, his capture of Goa, and death there, 359, his policy towards the natives, 359, 360

Albuquerque, John ac, first Bishop of Goa (1539 53 1 1), 244

Alexander the Great, his expedition to India, and compaigns in the Punjah and 5md (327 325 BC), 163 166

Alexandria, the modern Uchh in the Punjab, founded by Alexander, 166 Alfred the Great's Mission to India

(883 A D), 239 All Vardi Khan, Nawah of Bengal (1740 56), construction of the Marath 1 ditch around Calcutta as a protection

against the Marathas, 381 Aligarh, Descat of the Marathas at, by I ord I ake (1803), 398

Aliwal, Battle of, in the first 51kh will

Allahabad and Kora made over to the Mughal I mperor by Clive, 387 and footnote their resumption by Hastings and sale to the Wazir of Oudh, 389, 390

Almenda, Francisco de, first Viceroy of Portuguese India (1405 A D), 359 Alphabets of ancient India, 102, 103

Alianish the third monaich of the Slave dynasty (1211 36 AD), invasion by Mughals, 279

Ambala darbar, The, 425

Amboyna, massacre of, 362, 368, 561 Amherst, Lord, Governor General of India (1823 28), first Burmese war (1824 26), capture of Bhartpur, 403, 404

Amír Khan, the Pindán leader (1817),

An or Aeng, Pass over the Arakan Yoma Mountains in Burma, 6

Analysis of the Constitution of the East Intia Company, by P Auber, quoted,

364, 365 (footnotes)
Analysis of Indian foreign import and export trade, principal staples, 565

Aucuent India as described by Megas thenes and Airian, by Mr J M'Crin dle quoted, 168 (footnote 1), 356 (footnote)

Ancient land system of India, 438 Ancient mingling of castes, 195, 196

Andaman Islanders, The, 55, assassina tion of Lord Mayo at Port Blair, 425 Anicdota Oxomensia, Aryan series, 102

and footnote

Annals and Antiquities of Rajasthan, by Colonel Tod, quoted, 180 (footnotes 1 and 3), 184 (footnote 2), 185 (footnotes 1 and 3)

Antelope and deer, Varieties of, 657,

Antimony, 626

Arab expeditions to Bombay and Sind (636 828 AD), 263

Arakan Oil Company, 626, 627

Arakan Yomas, range of hills in Buima, 3
Archwological Survey of Western India,
Vir F Thomas' Papers in, quoted, 147
((outnote) 172 (footnotes), 175 (footnote 3), 182 (footnotes 1 and 4), 185
(footnote 4)

Architecture, ancient Indian, 112, 170, under the Mughal Emperors, 294,

304

Arcot capture and defence of, by Clive (1751), 379, 11val French and Linglish nominees for the throne of, 379

Area, towns, villages, houses, population, etc., of British India, Appendix I, 689

Argáum, Battle of, 323, 398

Armagaon, Fast India Company's factory established at (1625 26 AD), 368

Army of India, its constitution, 470, 471, the armics of the three Presidencies, 471, strength, 471, health and vital statistics, 675 684

Art and architecture in ancient India, 112, 170, 171

Arts and manufactures, 112, 113, also chap x pp 598 617 Luglish compettion with native att work, 598,

native rural industries, 599, fortified weaving settlements of the East India Company, 599, cotton weaving an indigenous industry in India, 599, its decline, but still a domestic industry supplying three fifths of the Indian consumption, 600, cotton weaving in different Provinces, 600, 601, special Indian cotton fabrics, 601 603, Indian silk weaving in Burma, Assam, and Bengal, 602, classes of silk fabrics, 602, 603, steam silk factories, 603, embroidery, 603, Kashmir shawls, 603, leather work, 603, velvet work, 603, jewelled embroidery, 604, carpets and rugs, 604, 605, goldsmith's work and jewellery, 605, 606, precious stones, 606, iron work and cutlery, 606, chain armour and damascene work, 606, 607, brass, copper, and bell metal work, 607, 608, pottery and tile work, 608, sculpture, 608, 609, wood carving, 609, inlaying and ivory carving, 609, European industries, cotton mills, 610 615, jute mills, 614 616, breweries, 616, 617, paper mills, 617, leather factories, 617

Arvan and Turanian migrations from

Central Asia, 174, 175, 130, 131 Aryan races of India, number in 1881, Also chap is pp 75 131 Aryan stocl, its European and Castern branches, 75, the Aryans in their primitive home, 75, 76, European and Indian languages merely varieties of Aryan speech, 76, Indo European words, 76, common origin of Euro pean and Indian religions, 76, the Indo Aryans on the march, and in their new settlements, 76, 77, the Rig Veda, its supposed dates, 77, Vedic hymns, 78, caste and widow burning unknown to the Rig Veda, 78, Aiyan civilisation in the Veda, 79, eastern spread of the Aryans, 79, the gods of the Veda, 79, Indra, the Cloud Compeller or 1211 bringer, and Agni, the God of Fire, 80, 81 other Vedic gods, & the Biahmanical triad, 81, blood loving deities of Hinduism scarcely known in the Veda, 82, the Horse Sacrince a substitution for Human Sacrifice, 82 Vedic conceptions of the Deity, 82, a Vedic hymn, 82, 83, primitive Aryan burnal, 84, burn ing of the dead 84, 85 Vedic legend of Yama, the King of Death, 85 Vedic farewell to the dead, 85, Vedic conception of immortality, 86, Aryan advance towards the Jumna and Upper Ganges, 86, Arvan tubes organized into kingdoms, 87 origin of priestly

families, 87, growth of the priest hood, 87, 88, the four Vedas, 88, the Biahmanas, 88, 89, the Sutras or sucred traditions, 89, formation of the Brahman caste, 89, growth of the warrior or Kshattrija caste, 89, 90, 40, the cultivature caste, (2012) 89, 90 the cultivating caste (Vaisya), 90 the four Hindu castes 90, 91, increase of Biahman, Ashattriya, and Sudra castes, 91 decrease of Vaisvas, 91, 92, struggle between the priestly | and warrior castes, 92, rising preten sion of the Brahmans, 92, well known prehistoric legends of Kshattriyas attain ing Brahmanhood 92, 93, the Middle land the focus of Brahmanian, 93, Aryan tubes outside the Brahmanical pale, 93, establishment of Brahman supremacy, 94 four stages of a Brahman's life, 95 the Brahman rule of life and its hereditary results on the caste 96 work done by Brahmans for India, 97 Biahman theology, 97, the post Vedic god- 97, 98 the Hindu triad 98 Brahman philosophy, its six daisanas or schools 98, 99, summary of Brahman religion, 100, Brahman science 100 Sanskrit grammar, 100, 101, Sanskri and Prakrit speech, 101 Sans rit manuscripts, 102, the Indian alphabets, 102, 103 Sans kut writings almost entirely in verse, 103, prose, a forgotten art, 103, 104, Sanskiit dictionaries, 104, Biahman astronomy, 104 100 Brahn an mathe matics 106 Biahman medicine, 106 110 Indian surgery 107, 108, Buddhist Jubic hospitals, 108, 109, decline of Hindu medicine, 109, Eng lish Medical Colleges, 108 109, verna cular medical publications, 110, Hindu art of war, 110 Indian music, 110 112, Indian architecture, 112, Indian decorative art and painting, 112, 113 Brahman law, 113 118, code of Manu, 113, 114 code of Vajnavalkja, 114, 115, scope of Indian law its rigid caste system, 115, 116, growth of Hindu law, 116, its incorporation of local customs 117, perils of modern codi fication, 117, 118, secular literature of the Hindus, 118 129, the Maha bharata, 118 122 the Kamayana, 122 125, age of the anskrit drama, 125, 126, Sakuntala and other Hindu dramas, 126, 127, the Hindu novel, 127, Peast stories, 127, Sanskrit lyric poetry, 128, the Puranas, 128, 129 Indian modern vernacular litera ture, 129, intellectual and religious development of the carly Aryans, 129, 130, the Brahmans in Indian history, and attacks on Brahmanism

from the 6th to the 19th century, 130,

Aryan influences on the Dravidian races, 329, 330, the modern Aryan verna culars of India, 334 355

Asiatic non Indian population of British India, Appendix VI, 694 Asoka, Buddhist King of Magadha or

Asoka, Buddhist King of Magadha or Behar (257 BC), 144 147, his Great Council (244 BC), 144, his Rock and Cave Fdicts, 145 and footnote, his Department of Public Worship, 145, his missionary efforts and doc trinal code, 145, character of the Rock Edicts, 146, 147 and footnote

Assam, unsuccessful invasion of, by Aurangzeb's general, Mir Jumla, 309, expulsion of the Burmese from, and annexation of Assam to British territories (1826), 404, yearly settlement of the land revenue, 445, frontier

trade of, 588 590

Assaye, Battle of, 323, 398
"Assisted" railways in India, 548

Astronomy, Biahmanical system of, 104
106 astronomy of the Vedas, 104,
Greek influences on Indian astronomy,
105, decay of astronomical science
under Muhammadan rule, 105, Raja
Iai Singh's observatorics in the 18th
century, 105, 106

Aswamedha or Great Horse Sacrifice of ancient India, 82, connection of the Hor e Sacrifice with the Human Sacrifice of pre Buddhistic times, 175, 176 Atharva Veda The, 88

Atrai, river of Bengal, its changes of

course, 30

Auber's Analysis of the Constitution of the East India Compan, quoted, 364, 365 (footnotes)

Auckland, Lord, Governor General of India (1836 42), 406 409, Afghan affairs and our early dealings with Kalbul, 406, 407, Dost Muhammad, Afghan dynastic wars, 407, Russian influences in Afghanistan and the in stallation of Shah Shuji and occupation of Kalbul by a British force, 407 408, rising of the Afghan people, and massiere of the British army on its retreat to India, 408

Aurangzeb, sixth Mughal Imperor of India (1658 1707 AD), 305 312, his rebellion and usurpation of the throne, 305, 306, chief events of his reign, 306, 307 and footnote, murder of his brothers, 307, conquests in Southern India, 307, rise of the Maratha power, 307, 308, Aurangzeb's Grand Army and twenty years' guerilla war with the Maráthás, 308, 309, his despair and death, 309, unsuccessful expedi-

tion to Assam, 309, his bigotry and persecution of the Hindus, 309, revolt of the Rajputs, 309, 310, revenues of the Empire, 310, 311, Aurangzebs character, 312

Australia, India's trade with, 578, 579 Avatars or Incarnations of Vishnu, 215,

216 (footnote 3)

## В

Babar, first Mughal Emperor of Delhi, (1526 30 AD), early life, defeat and overthrow of Ibrahim Lodi at Panipat, conquest of Northern India, 290, 291

Bahmani, Muhammadan dynasty Southern India (1347 1525 A D), 287

Bairam Khán, regent of the Mughal Empire during the early years of

Akbar's reign, 291, 292

Ban Rao, second Maratha Peshwa (1721 40 AD), his conquest of the Deccan and Malwa from the Mughals, and capture of Bassein from the Poitu guese, 320

Baji Rao II, seventh and last Maratha Peshwa (1795 1818), 323, second and third Maratha wars, and annexation

of the Peshwa's territories, 323, 324 Balaji Baji Rao, third Maratha Peshwa (1740 61), his expeditions to Bengal and to the Punjab, defeat of, by Ahmad Shah Duránı at the third battle

of Panipat, 320, 321 Balaji Viswanith, first Maratha Peshwa (1718 20), extorts chauth from the Delhi Emperor for the Deccan, 320 Balance sheet of British India, 465, 466

Balance of trade (India's), 558, 559, Si R Temple's Minute on, 581 583

Balasor, East India Company's factory

founded at (1642 A D), 369
Bilban, the last King but one of the Slave dynasty (1265 87 AD), his cruelties to the Hindus, Rajput revolts and Mughal inroads, his fifteen royal pensioners, 280

Ballantvne, Dr , The Sankhya Aphon isms of hapila, quoted, 154 (footnote 1)

Binkipur, old settlement of the Ostend East India Company on the Hugh between Calcutta and Chinsurah, its destruction by the Muhammadans (1753), 374

Bantam, a Presidency of the East Ind a Company in Java, 368, 369

Baptist Mission of Carey, Marshman, and Ward at Serampur, 260

Barak river, Steam Navigation on, 552 Barakhar coal seams, 637 Bari Doab Canal, 29, 532, 533

Barid Shahi, Muhammadan dynasty of Southern India (1492 1657 AD), 288

Barlaam and Josaphat (Saints) Legend of, and its analogies with that of Buddha, 151, 152

Barlow, Sir George, ad interim Gover nor General (1805 07), Mutiny of Vellore, 399

Baroda, Maratha State of Western India, 322, 323, deposition of the late Gaek war for an attempt to poison the British Resident at his Court, 323, 426

Bartholomew the Apostle, his preachings in India certified by Pantænus the Alexandrian (2nd century A D), 235, conversion of India proper ascribed to St Bartholomew, and of Persia and Central Asia to St Thomas, according to Hippolytus (220 A D ), 235

Barth's Religions of India, quoted, 161 (footnote 2), and his Revue de l'His torre des Religions, quoted, 161 (foot note 2)

Bassein, capture of, from the Portuguese by the Unrathas, 320, treaty of, at the concusion of the second Maratha war, 323

Baxar, defeat of the Mughal and Oudh armies at, by Major Munro, 386

Beal, Samuel, Si ju ki, or Buddhist Re cord of the Wistern World, translated from the Chinese of Hiuen Tsiang, quoted, 2 (footnote), 137 (footnote 2), 154, 155 (footnote 3) 155 (footnote 2), 175 (footnote 1), Catena of but dhist Suptuies from the Chinese, 142 (footnotes), 147 (footnote 2) (footnote I), 157 (footnote 2), 204 (footnote 2)

Beames, Mr John, Comparative Grammar of the Modern Aryan Languages of India, 67 (footnote), 103 (footnote, 335 and footnote, 337 (footnote 2), 339 and footnote

Bears, Species in India of, 655

Beast stories and fable, 127, beast hospitals, 201

Bediyas, a semi Hinduized gipsy clan of Lower Bengal, 71

Bells, munufacture of, 607

benfey Professor, article 'Indien' (pub lished in Ersch and Gruber's Encyclo fadu), quoted 110 (footnote 2)

Bengal, early English settlements in, 368 385, first permission to trade (1634 AD), 368, fectories at Hugli, Bala or and Kaumbazar, 369, 370, Bengal separated from Madras, 370, English in Bengal and their early factories, 380, native rulers of Bengal (1707 56), Murshid Kuli Khan, Ali Vardi Khan, and Sirij ud daula, 380, 381, capture of Calcutta, the 'Black

Hole,' and battle of Plassey, 381, 382, Mir Jufar (1757-60), 383, 385, Permanent Settlement of (1793),

441 445

Bengali literature and authors, 346 354 geographical area and linguistic feat ures of the Bengali language, 347, Sanskritizing tendency of Benguli, 347, the three periods of Bengali litera ture, 347, 348, court poets of Bengal in the 14th and 15th centuries, 348, Vishnuite and Sivaite religious poetry, 349, 350, Makunda Ram and the stories of Kalketu, and the Srimanta Sadagar, 350, 351, Kası Ram Das, the translator of the Mahabharata, 351, Ram Prasad, court poet of Nadiya in the 18th century, 352, Bengalı prose in the 19th century, and modern Ben

galf poets and authors, 353, 354. entinck, Lord William, Governor bentinck, General of India (1828 35), 404 406 his financial reforms, abolition of Sati, suppression of Thage, 405, the renewal of the Company's Charter, 405, 406, Mysore taken under British adminis tration, and Coorg annexed, 406

Berars handed over to the British by the Nizam as a territorial guarantee for his arrears of subsidy and for the pay of the Haultrabad contingent, 415

Beschi, Pere, Jesuit missionary scholar, 245, 253, 333

Letwa Caral, a famine insurance work

Bhagirathi, the name of the source and head waters of the (anges, 16

Bhakta Mala, the Hundu Acta Sanc torum, 208

Bharat Chandra Rai famous Bengali poet of the 18th century, 352

Bhars, an aboriginal and formerly domi nant race in Oudh, now a crushed tribe, 71, 187, present descendants of, 187

Bhartput, repulse of Lord Lake before, 398, capture of, by Lord Comber

mere, 404

Lhils, aboriginal tribe of Khandesh and Rajputana, formerly a predatory clan, now largely converted into peaceable and loyal soldiers, 72, cultivators.

Bhonsla, family name of the Maratha Chiefs of Nagpur, lapsed to the British for want of heirs in 1853, 322

Bhor Ghat, mountain pass in the Western Chats, 36, 550

Bhutan, war with (1864 65), 424, 425, trade with (1883), 588 590

Muhammadan Kingdom Southern India (1492 1657 AD), 288

Bidari work, damascening of silver on bronze, 607

Bidyapati Thakur, Court poet of Tirhut in the 14th century, 348

Bigandet, Bishop, Life or Legend of Gaudama, quoted, 137 (footnote), 160 (footnote 3)

Bihari Lal, Hindi poet of the 17th century, and composer of the Satsai,

Bijapur, Muhammadan Kingdom of Southern India (1489 1688 AD), 288 Biliapatam, East India Company's factors

started at (1661 A D), 370 Bird, Miss, Unhearen Tracks in Japan,

quoted, 152 (footnote 3), 202 (fcot note 1), 224 (footnote 3)

Buds of prey, 659

Birdwood, Sir G , Handbook to the British Indian Section of the Paris Exhibition of 1878, quoted, 163 (footnote 2) Report on the Miscellancous Old Ki cords in the India Office, quoted, 359 (sootnote 2), 360 364 (sootnotes 1 and 2), 368 (footnote), 370 (footnote) Bison, The Indian, 658

black Hole, The tragedy of the, at Cal

cutta (1756), 381

black Skins or non Aryans, described by the Aryans, 53, 54

Blochmann, Professor H, translation of the Ain i Akbaii, 272 (footnote), 291 (footnote 1), 295 (footnotes)

Boats, Bridges of, 551

Bolan, mountain pass over the Brahut hills, between Sind and Afghanistan, 6 Bombay, ceded to the 1 1st India Company (1661 AD), 370, made a Presidency (1684 87), 370, the main centre of Indian foreign trade, 560

Book binding and illumination, 112, 113 Lore, The, or tidal wave in the Hugh and Meghna, 30, 31

Boronga Oil refining Company in Akyab 627

Boscawen, Admiral, his ineffectual siege of Pondicherri (1748) 379

Botany of India, 662 664 Boun larics of India, 3, 4

Brahma, the Creator, the first person in the Hindu triad, 98

Brahman founders of Hinduism, 207 Brahmanas, sacred Sanskrit writings ex

planatory of the sacrifices and duties of the priests, etc., 88, 89

Brahmanical castes, north and south of the Vindhyas, 193, 194 and footnote

Brahmans, the priestly caste of ancient India, 87 100, origin of priestly families, 87 growth of the priesthood, 87, 88, the Brahman caste fully formed, 89, 90, struggle between the priestly and warrior castes, and ultimate

supremacy of the Brahmans, 92 94; Viswamitra the Kshattriya, and Vasishtha the Brahman, 92, 93, the four stages of a Brahman's life, 95, Brahman rule of life and its hereditary results on caste, 95, 96, Brahman theology, the post Vedic gods, 97, 98, the Hindu triad, 98, the six darsanas or Brahman schools of philosophy, 98, 99, Sanskrit grammar and speech 100, 101, Sanskrit manuscripts and dictionaries, 101 104, Brahman astro nomy, 104 106, mathematics, 106, medicine, 106 110, war, 110, music, 110 112, architecture and decorative art, 112, 113, painting, 113, law, 113 118, secular literature, the epics, 118 124, poetry and the drama, 125, 126, novels, Beast stones and fables, 128, post Vedic theological literature, the Puranas, 128, 129, modern Indian literature, 129, attacks on Brahmanism from the 6th century BC to the 19th century AD, 130, 131, the Brahman caste analyzed, 193, 194 Brahmaputra, one of the great rivers of India, 13 16, its course and tributaries, 13, discharge, 13, 14, silt islands, 14, 15, changes in course 15, traffic, 15, 16, junction of Ganges, Brahmaputra, and Meghna, 24, their combined delta and estuaries, 24, 25, alluvial deposits of the Brahmaputra, 27, steam navi gation on, 552 Brahui hills, a southern offshoot of the north western Himalayas, marking a portion of the boundary between India and Baluchistan, 7
Brandreth, Mr E L, Papers on the Gaurian languages, published in the Journal of the Royal Assatic Society,

vol x pp 64-66 (footnotes), vols xi and xii, 103

Brass and copper work, 607

Breweries 616, 617 Bridges of boats, 551

Briggs', 1 ieutenant Colonel, Translation of Firishta's History of the Rise of the Muhammadan Power in India, 271, 273 (footnote), 285 (footnotes 2 and 4),

287 (footnote), 291 (footnotes) British Administration of India, chap xvi pp 431 481 Control of India xv1 pp 431 481 in England under the Company and under the Crown, 431, Council of the Secretary of State, 431, the Viceroy and Governor General in Council, 431, 432, Executive and Legislative Coun cils, 432, 433, High Courts of Justice, 433, Law of British India, 433, 434, Provincial administration, 434, 435, 'Regulation' and 'Non Regula 435, 'Regulation' and 'Non Regulation' territory, 435, duties of District

Officers, 435, 436, Districts, number of, in India, 436, 437, the Secretariats of the Government of India and of the Local Governments, 437, 438, the land tax, 438 452, ancient land system of India, 438, the Musalman land tax, 439, the Zamindár made landlord, 439, landed property in India, and the growth of private rights, 439, 440, rates of assessment, Government share of the crop, 441, methods of assess ment, 440, 441, the Permanent Settle ment of Bengal, creation of proprietors by law, 441, 442, intermediate tenure holders, 443, Statistical Survey of Bengal, 443, oppression of the cultiva tors, 443, Land Law of 1859, 443, 444, subsequent enhancements of rent and appointment of a Rent Commission, 444, 445, its recommendations, three years' tenant right, and compensation for disturbance, 444, 445, Orissa tem porary Settlement, 445, Assam yearly Settlement, 445, rayatwari Settlement in Madras, 445, 446, Sir Thomas Munro's method of assessment, 446, Permanent Settlement in estates of zamindars and native chiefs in Madras, 446, 447, growth of cultivators into proprietors in Madras, and extension of tillage, 447, reduction of average land tax in Madras, 448, Bombay land system, the 'survey tenure,' its advan tages and disadvantages, 448, 449, debts of the Deccan peasant, 449 Bombay Agricultural Relief Acts of 1879 and 1881, and rural insolvency procedure, 449, 450, land Settlement in the North Western Provinces and Oudh, corporate holdings, 451, land system of Oudh, the Talukdars, 451, 452, land system of the Central Pro vinces, 452, land revenue of British India, 452, salt administration, sources of salt supply, and realization of salt duty, 452, 453, working of the salt monopoly, 453, 454, process of salt manufacture, 444, excise on country spirits, rice beer, opium, ganja, and charas, 454, 455, nunicipal administration and statistics, 455 457, Imperial finance, and the 'business' of the Indian Government, 457, 458, changes in systems of account and the obscurities resulting therefrom, 458, 459, gross and net taxation of British India, 459 461, English and Indian taxation, 459 461, Indian taxation under the Mughals and under the British, 462, 463, incidence of taxa tion in Native States and British terri tory, 463 465, gross balance sheet of British India, and analysis of Indian

revenues, 465, 466, nature of the land tax, 467, items of taxation summarized, 460, 461, 467, 468, Indian expendi ture,—the army, public debt, loss by exchange, public works, railways, etc., 468 470, local and municipal mance, 470, constitution and strength of the three Presidency armies, 471, police and jail statistics, 472, education, 472 479, education in ancient India, village schools and Sanskrit tols, 472, 473, the Company's first efforts at education, the Calcutta Madrasa and other colleges, 473, mission schools, 473, State system of education, 474, 475, the Education Commussion of 1882 83, and its recommendation, 474, educa tional statistics of British India, 474, 475, the Indian Universities and their constitution, 475, 476, colleges, middle schools, and primary schools, in the various Provinces, 476 478, girls schools, 478, 479, normal and other special schools, 479, the vernacular press and native journalism, 480, registered publications in India, 480, 481 —For historical details, see E.G. IISH IN INDIA, and HISTORY OF BRITISH RULE

British Burma, its physical geography, products, etc , 41, 42 - Sce also BURMA British conquest of India, not from the Mughals but from the Hindus, 317

British India, its twelve Provinces, area and population in 1881, 43 45, also Appendices I to X, 689 703

Britto, John de, Jesuit priest in Southern India, murdered (1693 A D), 245

Brocades, 603

Brydon, Dr, the solitary survivor of the Kabul garrison in its retreat from Af

ghanistan, 408

Bucephala, memorial city on the west bank of the Jehlam, founded by Alexander, and named after his favourite charger, Bucephalus, near the modern

Jalalpur, 165 Buchanan Hamilton, Dr Francis, his MS Survey of the North Eastern Districts of Bengal, quoted, 205, 206

(footnote 4), 207 (footnote 1) Buckingham Canal in Madras, navigation

on, 553 Buddha, the Sakya, 176, 177

Buddha, his I ife, his Doctrine, his Order, by Professor Oldenberg, quoted, 161 (footnote 3)

Buddham, and life of Gautama Buddha, chap v pp 132 162 The story of Buddha modelled on the pre existing Indian epic type, 132 135, Buddha and Rama compared, 132, parentage of Buddha, his youth and early married life, 133, his Great Renunciation, 133, 134, his Temptation in the forest, 134, his 'Enlightenment, 134, 135, his public teachings and disciples, 135, his conversions in the Gangetic valley, and of his own family, 135, 136, his last words and death, 136, different versions of the legend of Buddha, 136, 137, biographies of Buddha, 137, 138, the southern and northern versions, 138, political life of Buddha, 139, defeat of his opponents by magical arts, 139, 140, overthrow of the schismatic Devadatta, 140, Buddha as a Sakya prince, 140, Chinese text of Buddha's dying discourse, 141, his doctrines, 141, law of Karma, 141, 142, law of Nirvana or 'liberation,' 142, moral code of Buddhism, 143, missionary aspects of Buddhism, 143, the four great Buddhist Councils, 143 147, the work of Asoka, his great Council, 144 146, his Rock Elicts, 144, 145, Asoka s missionary efforts, 146, 147, his reformed canon of the Buddhist scriptures, 146, 147, Kanishka's Council and his three commentaries on the Buddhist faith, 147, the northern and southern canons, 147, 148, Buddhisin as a national religion 148, its religious orders and practical morality, 148, 149, spread of Buddhism in the south to Ceylon, and in the north to China, 149, 150, Buddhist influence on Christianity, 150, 151, Buddha as a Christian saint, 151, legend of saints Barlaam and Josaphat, 151, 152, a Japanese temple, its analogies to Hinduism and Christianity, 152, Buddha as an incarnation of Vishnu, 153, Buddha's personality denied, 153, 154, continuous co existence of Buddhism and Brahman 15m, 154, modern Hinduism, the joint product of both religions, 154, 155, Buddhism in India in the 7th century A D , 156 , Council of Siladitya, 156, Siladitya's charity, 156, 157, monastery of Nalanda, 157, mingling of Buddhism and Brahmanism, 157, victory of Brahmanism, 157, 158, Buddhism an exiled religion from India, 158, its foreign conquests, 158, Buddhist suren's in India, 158 102, the Jains, 158 162, Jain doctrines, 159, Jain temple cities, 159, relation of Jamism to Buddhism, 159, 160, antiquity of the Jams, 160, 161, date of the Jam scripture, 161, 162, the Jams an independent sect, 162, modern Jainism, 162

Buddhist population in India, 136 (and footnote), sec also Appendix V, 693,

Buddhist influences on later religions, analogies of a Japanese temple to Hinduism and Christianity, 152, 202

Buffaloes, 520, 658

Buhler, Dr G , Tour in Search of Sanskrit MSS, published in the Journal of the Bombry Branch of the Assatic Society, No xxxiv A, vol xii, 1877, quoted, 102 (footnotes 1 and 3), Digest of the Hindu Law of Inheritance, Partition, and Adoption, 117 (footnote 2)

Building stone, 627, 628

Bundelas, a Rajput tribe, formerly the ruling race in Bundelkhand, ousted by the Marathas, 71 and foot note

Burma, in ancient times and in the 15th century A D, 403, encroachments on India and first Burmese war (1824 26), 403, 404, annexation of Assam, Arakan, and Tenasserim, 404, second Burmese war (1852) and annexation of Pegu, 413, 414, prosperity of Burma under Bittish rule, 414, annexation of Upper Burma (1st January 1886), 430, export of rice from, 572, trans frontier trade with 588 590, geology of, 639, 640 - See also BRITISH BURMA

burnell, Dr , Palaography of Southern India, quoted, 103 (footnote), The Ordinances of Manu, 114 (footnotes) Daya vibhagha, 117 (footnote), 195

(footnote 2)

Burnes, Sir Alexander, assassination of, m Kabul (1841), 408

Cabot's attempt to reach India by way of the north west passage, 363

Cabral's expedition to India (1500 A D ), and establishment of Portuguese fac

tories at Calicut and Cochin, 358 Cacharis, a semi Hinduized aboriginal

tribe of Assam and North Eastern

Bengal, 71 (footnote)

Calcutta founded (1686 AD), 371, cap ture of by Siraj ud Daula, and the Black Hole, 361, re capture of Calcutta by Clive, 381, 382, Calcutta Canals, 553, Calcutta as a seaport and its share of trade, 559 560

Caldwell, Bishop, Comparative Grammer of the Dramidian Languages, quoted, 65 68, and foutnotes, 173 (footnote 2), 240 (footnote 1), 327 (footnotes 2 and 3), 328 (footnote), 330 (footnote 2), 332 (footnote), 340 (footnote I), 369 (footnote)

Calicut, visits of Vasco da Gama to, and establishment of a Portuguese factory,

357, 358, attempt of the English to establish a factory at, 367

Camels, 520, camel hair embroidered shawls, 603

Campbell, Sir Colin (Lord Clyde) relief of Lucknow by, 421, campaign in Oudh, 421, 422

Campbell, Sir George, Specimens of the Languages of India, quoted, 67 (foot-

Canals (irrigation) in Sind and Bombay, 530, 531, the three great Punjab canals, 531, 532, the Doab canals in the North Western Provinces, 532, 533, Orissa canal system, 534, the Son canals and irrigation in Bengal, 534, 535, irrigation works in the Madras deltas, 536, 537

Canning, Larl, Governor India (1856 62), 417 424 Larl, Governor General of The Mu tiny of 1857 58, 417 424, downfall of the Company, 422, India transferred to the Crown, and the Queen's Proclamation, 423, 424, Lord Canning the first Viceroy, 424, financial and legal reforms, 424

Car Pestival of Jagannath, 224 226, self immolation not practised, 224, blood less worship and gentle doctrines of, 225, 226

Carnelians 629

Carpet weaving, 604

Caste, formation of the four castes, 87 91

Caste rewards and punishments, 199

Caste system, its religious and social aspects, 192 200

Catina of Buildhist Scriptures from the Chinese, by Mr S Beal, quoted, 142 (footnote 1), 147 (footnote 2), 150 (footnote 3), 157 (footnote 2), 176 (footnote 2), 204 (footnote 2)

Cathaj and the Hay Thether, by Colonel Yule, quoted, 233 (footnote 2), 238

(footnote 3)

Catholic Missions in India, 229 259 Origin of Christianity in India, 229, 230 the three legends of St Thomas the Apostle, Thomas the Manichean, and Thomas the Aimenian, and their respective claims as the founder of Indian Christianity, 231 235, Nes torian Church in Asia side by side with Buddhism for 1000 years, its wide diffusion, 255, 236 the forcible conversion of the Nestorians or St Thomas Christians, to the Church of Rome, by the Portuguese, 241 243, Syrian and Jacobite Catholics in Malabar, 243, 244, labours of St Francis Navier, 244, 245, early Jesuit priests, their conversions and literary labours, agricultural settlements, and collegiate city of Cochin, 245 253, Portuguese inquisition established at Goa, autos da fi, and abolition of the inquisition, 253, 254, suppression of the Jesuits (1759 73) and their re estab lishment (1814), 254, 255, organization of modern Roman Catholic Mis sions, 255 jurisdiction of the Arch bishop of Goa, 255, 256, distribution of Roman Catholics, 257 Syrian and Roman Catholic Christians, 257, Roman Catholic population of India, 258, progress of Roman Catholicism, its missions, colleges, and schools, 259

Cattle, Breeds of, 520

Cave inscriptions of Asol a, 145, 146 Cawnpur, the Mutiny at, massacre of the garrison and the women and chil dren, 420

Central Asia, trans Himalayan trade with,

586 590

Ceylon, India's trade with, 578, 579 Chain armour, manufacture of, 606, 607 Chaitanya, Hindu religious reformer (1485 1527 AD), his life and teach ings, 219 221

Chait Singh, Raja of Benares, exactions of Warren Hastings from (1780), 390

handarnagar French Settlement in Bengal, 381, bombardment and cap ture of, by Admiral Watson (1757), Chandarnagar 382

Chand Bardai, Hindi poet '12th century),

345

Chandelas, formerly a ruling race in Bundelkhand, North Western Pro vinces, 71

Chandi Das, religious poet of the 15th century, 348, hymn to Krishna, 348 349

Chandra Gupta, King of Vagadha (326 BC), 166 170, cussion of the Greek pos essions in the Punjab to, by Seleukos Alexander's successor (306 BC), the Embassy of Megasthenes, 167 170

Changes of caste occupation by the Shahas, Telis, and Tambulis of Bengal,

196, 197

Changes of river-beds and deserted river capitals, 30

Character of the non Aryan tribes, their fidelity as soldiers, 72

Charal pija or hook swinging festival, 213

Charas, Excise duty on, 455

Charities of Indian trade guilds, 198 Chauth, or 'quarter revenues' exacted by the Marathas in the Deccan and in Bengal, 320, 321

Cheetah or hunting leopard, 653, 654.

Chera, ancient Hindu dynasty in Southern Ind12, 286

Cherra Punii, runfall at, 7, 649, 650 Child, Sir John, 'Captain General and Admiral of India' (1684), also Governor General, 370, 371

Child worship of Krishna, 222

Childers, Mr, Dictionary of the Pai Language, quoted, 132, 134, 137, 138, 142 (footnotes)

Chilianwala, Battle of, 412, 413

China, India's trade with, 577, 582, 583

Chinsurah, defeat of the Dutch at, by Clive, 362, 363, head quarters of the Dutch settlement in Bengal, 381

Chips from a German Worlshop, by Professor Max Muller, quoted, 83 (footnote 1), 127 (footnote 3), 142 footnote 2), 151 (footnote 1)

Chola, Ancient Hindu dynasty in

Southern India, 286

Christianity in India (100 to 1881 A D ), chip ix pp 229 267 Christianity coeval with Buddhism in India for 900 years, 229, origin of Christianity in India, 229, Syrian Christians in India, 230, the three legends of St Thomas, 250 233, wide meaning of India in the writings of the Christian Fathers, 233, 234, first glimpse of Indian Christians (190 AD), 234, ancient Roman trade with India, 234, Jew Settlements in ancient Malabar, 234, 235, Indian Christians (190 547 A D), as described by Pantænus, Hippolytus and Cosmos Indicopleustes, 235 Vestorian Church in Asia, 235, 236, Nestorianism and Buddhism side by side for 1000 years, 236, wide diffu sion of the Nestorian Church, 236, 237, the 'Thomas Christians' of Persia and of India, 237, localization of the legend of St Thomas, 237 239, embassy of Alfred the Great to India (833 AD), 239 troubles of the ancient Indian Church, 240, the Nestorian St Thomas Christians of Malabar, a powerful and respected military caste, 240, 241, Portuguese efforts at their conversion to Rome, 241, Synod of Diamper (1599 AD), 241, 242, Malahar Christians freed from Portuguese oppression by the Dutch, 242, 243, Jacobite and Syrian Christians in Malabur, 243, extinction of Nestorianism in Malabar, 243, 244. early Portuguese missionaries identified with Portuguese aggressions, 244, havier and the Jesuits (1542 AD), 244, 245, work done by the Madras Jesuits, 245, 246, early Jesuit stations in India, 246, conquest and con

version the basis of Portuguese Indian rule, 246, 247, parochial organiza tion of Portuguese India, 247, Jesuit station of Ihana (1550 AD), its Christian craftsmen and cultivators, 247, 248, Jesuit ruial organization, 248, Cochin, a Jesuit collegiate city, 248, 249, Jesuit itineraries and con versions, 250, 251, the Walal ar Mission in the 17th and 18th centuries. 251, caste questions among Malabar Christians, 251, 252, Christian martyr doms, 252, 253, establishment of the inquisition at Goa, 253, 254, autos da fé, 254, persecutions and aggres sions by Portuguese, 254, Goa inquisi tion abolished (1812), 254, suppression of the Jesuits (1759), 254, 255, their re establishment (1814), 255, organiza tion of Roman Catholic Missions in India, 255, separate jurisdiction of the Archbishop of Goa, 255, 256, distribution of Roman Catholics, 257, the Verapoli vicariate in Iravancore, 257, Syrian and Roman Catholic Christians, 257, statistics of Roman Catholic population of India, 258, Roman Catholic progress, 259, Pondi cherri Mission, 259, Catholic colleges and schools, 259, first Protestant Missions in India (1705), 259, 260, vernacular translation of the Bible (1725 AD), 260, Protestant mis sionaries in Tanjore, Calcutta, and Serampur, 260, opposition of the East India Company to Missions, 260, Bishopric of Calcutta, 261 Indian sees, 261, Presbyterian and Protestant Missions, statistics of Protestant Missions, 261, 262, increase of native Protestants, 262, 263, extended use of native agency, 203, rapid development of school work of Protestant Missions, 262, 263, general statistics of Chris tian population in India, 263, 264 Protestant denominational statistics, 264, 265, Indian Ecclesiastical estab lishment, 266, 267

Chronule of the Pathan Kings of Delhi, by Mr L Thomas, quoted, 271 (foot note), 280, 281 (footnotes), 283 (footnote 1), 284 (footnote 1), 285 (footnote 3), 257 (footnote 2), 291 (footnote), 298 (footnote 1)

Chronological table of Governors, Gover nors General and Viccious of India (1758 1885), 384

Chronological table of Muhammadan conquerors and dynasties (1001 1857 AD), 271

Chronology of early I uropean travellers to India, 356, 357 (footnote)

Cinchona cultivation, 509 511, intro duction of plant, 509, the plantations in Southern India and at Darjiling, 509, 510, statistics of out turn and tinancial results, 510, 511

Clive, struggle with Dupleix in the Kar nátik, 378, 379, defence of Arcot, 379, re-capture of Calcutta, 381, 382, battle of Plassey and its results, 382, Chive's jaylr, 363, 384, appointed Governor of Bengal, 384, Chive's second Governorsh p, 386, his partition of the (appearance). the Gangetic valley, 387, grant of the diu ani of Bengal, 387, reorganization

of the Company's service, 387 Clyde, Lord, relief of Lucknow, 420 campaign in Oudh, and suppression of

the Mutiny, 421 Coal and coal mining, 41, 619, history of Bengal coal mining, 619, 620, coal in the Central Provinces, 620, 621, Ranigan, coal fields, 621, outlying coal beds, 621, 622, future of Indian coal, 622, geology of Indian coal helds, 636, 637
Coalition of Vishnuism with Islam in

Kaburs teaching, 219

Coasting trade of India and coast shipping, 583 586

Cobalt in Rajputana, 626 Cobra di capello, The, 660

Cochin, the Jesuit Collegiate city of the 16th century, 248 250, first establish ment of Portuguese factory at (1500 AD), 358

Coffee cultivation, 502 504, its intro duction into India, 502, area undei cultivation, 502, 503, suitable sites for gardens, 503, processes of preparation, 503, 504, exports of, 575

Colebrooke's Essays, quoted, 191 (foot note 2)

Colleges and high schools, 476, 477 Commerce and Navigation of the Ancients in the Indian Ocean, by Dean Vincent, quoted, 164 (footnote 1), 356 (foot note)

Commerce and Navigation of the Eryth raan Sea, by Mr J M'Crindle, quoted, 166 (footnotes I and 2), 356 (footnote) Commerce and trade, chap vix pp Ancient and medieval trade of India, 555, function of modein Indian trade, 555, 556, sea borne trade impossible under the Mughals, 556 growth of trading and industrial cities under British rule, 556, 557, summary of Indian exports (1700 1985), 558 India s bilance of trade, 558, 559, the Home charges, 559, India's yearly trude saving, 559 the chief Indian ports of export trade, 559, 560, early Portuguese trade, 560, Dutch mono

INDLX716

poly of eastern trade, 560, early English factories and advance of Eng In 1834, 561, 562, abolition of inland duties (1836-48), 562, growth of Indian foreign trade (1840-84), 562, 563, Indian trade statistics (1878 85), 563 565, Suez Canal trade, 564, tabular statistics of import and export trade (1882 83), 566, 567, Manchester cotton goods import trade, 565 568, treasure, import of, and proportion of gold to silver, 568, 569, raw cotton export trade, 569, 570, jute exports, 570, 571, rice export trade, 572 rice export duty, 572, 573, wheat trade and exports, 573, oil seeds, 573, 574, ındıgo, safflower, myrobalam, turmeric, and lac, 574, 575, tea and coffee ex ports, 575, exports of cotton and jute manufactures, 575, 576, India's trade with different countries, 577 580, growth of Suez Canal trade, 581, Sir R. Temple's Minute on the balance of Indian trade, 581 583, coasting trade and shipping of India, 583-586, frontier trade, 586, trans frontier trade with Afshanistan, Central Asia, Nepal, Tibet, Burma, and Siam, 586 590, internal trade of India, 591, trading castes in Southern and Northern India, 591, 592, local trade of India, village money lenders, travelling brokers, re ligious fairs, etc., 592, 593, internal trade the chief safeguard against famine, 593, 594, normal action of internal trade, 594, Provincial statistics of internal trade, 594, 595, trade of Patna town, 595, 596, the village mart of Dongargaon, 596, rural fair at

Karagola, 596, 597 Common origin of European and Indian

religions, 76

Common shrines of various faiths, 203, 204, Muhammadan and Hindu wor ship at St Thomas' shrine in Madras,

Communication, Means of - See MEANS OF COMMUNICATION

Comorin, cape at the southernmost ex

tremity of India, 3

Comparative Dictionary of the Bihari Language, by Messrs Herrnle and Grierson, quoted, 336 and footnote, 337 (footnote I), 341 and footnote, 344 (fuotnote)

Comparative Grammar of the Dravidian Language, by Bishop Caldwell, quoted, 66, 67, and footnotes, 173 (footnote 2), 240 (footnote 1), 327 (footnotes 2 and 3), 328 (footnote), 330 (footnote 2), 332 (footnote), 340 (footnote 2), 369 (lootnote)

Comparative Grammar of the Gaudian Languages, by Professor Hærnk, quoted, 336 and footnote, 337 (foot

note 1)

Comparative Grammar of the Modern Aryan Languages of India, by Mr John Beames, quoted, 67 (footnote), 103 (footnote), 335, 337 (footnote 2) Compensation for disturbance on eviction

in Bengul, 445

Complexity of the Hindu caste system,

192 194

Control of India in England under the Company and under the Crown, the Secretary of State's Council, 431

Coote Sir Eyie, defeat of Lally at Wande wash (1761), 379, 380, in the first Mysore war (1780), 392

Copper and copper mining, 42, 607,

625, 626

Conwallis, Marquis of (1786 1793), 392 394, his revenue reforms and the Permanent Settlement of Bengal, 393 second Mysore war, 394, second ad ministration of Lord Conwallis (1805) and his death after a few weeks in India, 399

Corporate holdings of cultivated land in North Western Provinces and the

Punjab, 451

Cosmos Indicopleustes' history of the Christian Church in Ceylon and along the Malabar seaboard (547 AD), 235 Cosquin, M. Emmanuel, Revue des Ques-tions Historiques, hv 56, quoted, 151 (footnote 3), 152 (footnote 2)

Cotton cultivation and manufacture, 491 the American war, its effects on Indian cotton growing, 491, 492, cotton districts in India, area under cultivation, and out turn, 492, 493, cotton cleaning, 494, imports of Manchester goods, 565, 566, exports of law cotton, 569, 570 exports of manufactured cotton, 575, decline of cotton weaving owing to Manchester competition, but still a domestic industry in India, 599 601 steam cotton mills in different Pro vinces, 611, 612, sound basis of Indian cotton manufacture, 611 613, exports of Bombay manufactured cotton to China and Africa, 613, 614, future pro-pect of Indian cotton manufactures,

Cotton import duties, Abolition of, 468 Covelong (or (oblom), old settlement of the Ustend East India Company on the

Madras coast, 373

Covilham, earliest recorded Portuguese traveller to Cochin (1487 A 1), 357, Jesuit missionary in Southern India, killed in 1500, 244

Criminal Tribes Act, 71

Crocodiles, 660 661

Crops of the Himalayas, 8, of the river plains and Gangetic delta, 32, 33, of Southern India, 40, 41, of Burma, 42 -See also chap xvii, Agriculture and Products, 484 511

Crop statistics for India, Uncertainty of,

500, 501

Crushed tribes, 71

Csoma de Koros, I ife and Works of, by Dr Theodore Duka, quoted, 153 (foot note I)

Cultivated, cultivable and uncultivable area, etc., of certain Provinces of British India, Appendix III, 691

Cultivators, Rights of, reserved by the Permanent Settlement of Bengal, 442, 443, oppression of, by rack renting landlords, 443, the Land Act of 1859, 444, Rent Commission of 1879, and its proposed reforms in the direction of fixity of occupation and compensation

for disturbance, 444, 445 Cunningham, General, Corpus Inscrip tionum Indicarum, quoted, 103 (foot note), 144 (footnote), 145 (footnote), 146 (footnotes), 153 (footnote 2), 167 (footnote 1), Ancient Geography of India, 155 (footnote), 157 (footnote 1), 164 (footnotes 1 and 3), 165 (footnote) 166 (footnote 1), 167 (footnote 3), 185 (footnote 2), Reforts of the Archaeological Survey of India, 185

(footnote 4)
Cust, Mr R N, Linguistic and Oriental Essays, quoted, 103 (footnote)

Customs, inland lines, abolished by Loid Mayo, 425, customs import duties abolished by I ord Ripon, 429

Customs revenue, 467 Cutch, Silver jewellery of, 605 Cutlery manufactures, 606

Dacca muslins, a decaying manufacture,

Dadu, religious reformer and sacred poet of Raiputana (16th century), 344

Dae, Mr Arcy, The Literature of Bengal, quoted, 347 (and footnote), 348, 349 (and footnote), 352 (footnote)

Dalhousie, Earl of, Governor General of India (1848 56), 412 417, his ad ministrative reforms, 412, inaugura tion of the Indian railway system and the Public Works Department, 412, second Sikh war and annexation of the Punjah, 412, 413, second Burmese war and annexation of Pegu, 413, 414 Lord Dalhousie's policy towards Native States, 414, 415, Lord Dal

housie's annexation of Oudh, and jutification of the measure, 415 417, Lord Dalhousie's scheme of trunk

military railways, 545
Dalton, Colonel E 1, Ethnology of

Bengal, quoted, 67 (footnote) Damascened steel work, 607

Damodar coal tract, Geology of, 636 638 Dandis, a sect of Sivaite religious as cetics and mendicants, 213, 214

Danish East India Companies (1612 and 1670 A D ), and their settlements, 372 Danish missionaries, 259, 260

Daryus, the Aryan name for the non

Ayrans, or aborigines, 53 Davids, Mr Rhys, Buddhism, quoted, 137 (footnote), Buddhist Birth Stories, 137 (footnote)

Death rate and average duration of life in India, 666, 667, death and birth rates in different Provinces, 667 679

Debt of India and its growth, 469 Deccan, The, or Southern India, 34 41 its mountain ranges and elevated table land, 35, 36, mountain passes, 36, 37, rivers, 37, forests, 38, 40, scenery, 40, crops, 40, 41, minerals, 41 Maratha power in the Deccan, 320, 322, 323

Deccan Agriculturists' Relief Acts, a rural insolvency law, 449, 450 Decennial Settlement, The (1789 1791),

Decline and fall of the Mughal Empire (1707 1857 AD), 312 316, chief events, 312, 313 and footnote, the six puppet kings, 313, independence of the Deccan and Oudh, 314, the Maratha chauth, 314, invasions of Nadir Shah the Persian, and Ahmad Shah the Afghan, 314, 315, misery of the Provinces, 315, third battle of Panipat, 315, fall of the Empire, 315, 316

Decline and Fall of the Roman Empire, quoted, 2,0 (footnote 1), 239 (foot

Decline of the Peshwas (1772 1818), 321,

Decorative art in India, 112, 113

Deer, Varieties of, 657, 658 Delhi, Siege and storm of, 421

Del Mar's History of Moncy in Ancient

Countries, quoted, 163

Delta of Bengal, 23 28, deltaic distribu taries, 23, combined delta of the Ganges, Brahmaputra, and Meghna, 24, deltaic swamps, 24, land making, 25 size of the Bengal delta, 26, deltaic depressions, 26, subterranean structure of the Bengal delta at Cal cutia, 26 (footnote), alluvial deposits of the Ganges and Biahmaputra, 26,

27, amount of silt deposited at Ghazi pur and in the delta, 27, 28, age of the Bengal delta, 28

Deltaic channel of the Ganges, Section of,

Density of the Indian population, 46, overcrowded and under peopled Pro vinces, 46, 47, population entirely rural, 46, immobility of the rural population, 47, relation of labour to land, 48, 49, unequal pressure of the population on the land, 49, 50 in crease of population since 1872, 50 Deserted river marts and capitals, 30

Devadatta, the Buddhist schismatic, 140

Dhangars, a semi Hinduized tribe of Bengal and Chutia Nagpur, their numbers in 1872, 71 (footnote 1)

Diamonds, 41, 628, 629
Dictionary of Hindu Uithology, by Professor Dowson, quoted, 180 (foot note 4), 184 (lootnote 1)

Dg, Battle of, and defeat of Holkar, 323

Diminution of population in Madras and Mysore, 50

Dina Bandu Mitra, dramatic poet and author of the Vil Da pan, 354

Dina Krishna Das Uriya poet of the 16th century 343

Distillation of country spirits, 454

Distribution of Ind an trade with foreign countries, 565 580 District officers, Duties of, 436

Districts, Number of, in India their varying size and population, 436, 437 Diwani, or financial administration of Bengal, granted to the Lat Inoia

Company (1765), 387 Dnyanoba, Maiathi poet of the 13th century, 346

Doctrines of Buddha, 141, 142, moral

code and a issionary aspects of Buddh 1sm, 143

Dog, Different varieties of, 654

Dongargaon, mait in the Central Pro

vinces, 596 Dowson, Professor, Dutionary of Hindu Mythology, quoted, 180 (footnote 4), 184 (footnote I)

Drama, The Indian, 125 127, 354 Draupali, the wife of the five Pandava brethren in the cpic of the Maha

Dravidians, The, aboriginal races of Faily History of Tibet and Khoten, in Southern India, their languages, 64, 68, place of Dravidian languages from the Libetan classics, 176 and 177 in philology, 327, 328, the Dravidians in Sanskrit literature, 328, pre Aryan Dravidian civilisation, 328, Dravidian art, 328, 329, Brahmanical influence on the Dravidians, 329, 330, develop

ment of Dravidian speech into ver nacular literatures, 330, Tamil, the oldest and the most influential vernacular of Southern India, 330, Jain cycle of Tamil literature, earliest lamil poets, 331, Tamil hymnology, 332, modern Tamil writers, Beschi, the Italian Jesuit and Tamil scholar, 333, recent statistics of lamil litera ture, 333

Droughts --See FAMINES

Drugs and medicines, 34.

Dual system of administration in Bengal (1767 72), 387, 388

Duarte Nunez, first Portuguese bishop in India (1514 17 A D ), 244

Duff Rev Alexander, first Presbyterian missionary to India, 261

Dufferin Larl of, Vicerov (1884), 430 Duka, Dr Theodore, I fe and Works of Alexander Csoma de Koros, quoted, 153 (footnote 1)

Duncker, Professor Max, Ancunt History of India, quoted, 81 (footnote 2), 84 (footnotes 2 and 4), 115 (tootnote) 163 (footnote 4)

Duplers, French administrator, his ambition of founding a French Empire in India, and his struggles in the Karnatik

with Clive, 378 379 Durani rule in Afghanistan (1747 1826), 406, 407

Duration of life (average) in India, 667 Duiga, one of the forms of the wife of

Siva, 211, 212 Dutch The in India (1602 1824 AD), 361 363, Dutch Lat India Com panies, 361, 362, supremacy of the, in the Eastern Seas, brilliant progress, and decline 362 Dutch relies in India, 363, English 'Treaty of Defence' with the Dutch (1619), 367, ma sacre of Amboyna, and expulsion of the English from the Lastern Archipelago (1624), 368, Dutch conquests in India, 371, 372, Dutch defeated by Chie at Chinsurah, 385, Dutch monopoly of Lastern trule (1600), 560

Dyes, export of, 574, 575

# E

Faily Greck historians of India, 163,

(footnotes)

Farly Muhammadan rulers (711 1526 AD), chap x pp 268 289 Farly Arab expeditions to Bombay (636 711 A1), 268, Muhammadan settlement in Sind (711 AD), 268, expulsion of the Muhammadans from Sind (828 AD), 268, India on the eve of the Muhammadan conquest (1000 AD), 268, 269, the Hindu kingdoms and Hindu power of resist ance, 269, slow progress of Muham madan conquest, 269, 270, Muhamma dan conquest only partial and tempo rary, 270, recapture of India from the Muhammadans by the Hindus (1707 61 AD), 270, chronology of Muliammadan conquerors and dynas ties of India (1001 1857 AD), 271, Turkí invasions, Subuktigin (977 997 AD), 272, the seventeen invasions of Mahmud of Ghazni (1001 24 A D ), 272 274, the Somnáth ex pedition, 273, 274, Mahmud's con quest of the Punjab, 274, the Ghor dynasty (1152 1206 AD), 275 278, Muhammad of Ghor's invasions (1191 1206 A D), 275, 276, his conquest of Bengul (1203 A D ), 277, 278 Muham mad's work in India and subjugation of Northern India, 278, Kutab ud din (1206 10 AD), 278, the Slave dynasty, 278 280, Altamah (1211 36 4 D), 279, the Empress Raziva (1236) 39 A D ), 279, Mushal irruptions and Rajput revolts (1244 88), 279, 280, Ralban (1265 87 A D ), his cruelues, 280, his Royal pensioners, 280, end of the Slave Kings, 280, the house of Khilji (1290 1320 AD), 280 283, Ala ud din's 121ds into Southern India (1294), 281 conquest of Northern India (1295 1303), 281, conquest of Southern India (1303 15), 281, 282, Muhammadan power and population in India (1306), 282 Mughal merce naries and Hindu revolts, 281 Khusru, the renegade Hindu Empeior (1316 20 A D), 282, 283 the house of Tughlak (1320 1414 AD), 283 286, Muhammad Tughlak (1324 51 AD), his expeditions, cruelties, forced cur rency, 283, 284, revolts, 284, Mu hammad Lughlak's revenue exactions, 284, 285, Firoz Shah Tughlak (1,51 88 AD), his canals, 285, Timur's invasion (1398 AD), 285, ruin of the Tughlak dynasty, 285, 286, the Sav yid, Lodi, and Bahmani dynasties (1450 1526 AD), 286, 287, Muhammadan States of the Deccan, 288, the Hindu kingdom of Vijayanagar, 286, 288, independent Nayaks and Palegars of Southern India, 288, independent Muhammadan kingdoms of Bengul, Gujarat, and Jaunpur, 289

Tast India Companies, and early Furo pean Settlements, Portuguese, 356 361,

Dutch, 361 363, English, 363 371, other India Companies, 371, French, 372, Danish, Scotch, and Spanish, 372, German or Ostend, 372 374, 376, Prussian, 374 376, Swedish, 376, causes of failure, 376, 377
East India Company (English), 363

365, first Charter, 364, amalgamated Companies, 365, early voyages, 365, 366, defeat of the Portuguese at Swally, 366, wars with the Dutch, 367, 368, massacre of Amboyna, 368, early English factories, 368 370, foundation of Calcutta (1686), 371, the Company embarks on territorial sway (1689 AD), 371, downfall of the Company, and transfer of India to the Crown (1858 A D ), 422

Eastern branches of the early Aryans,

Eastern Ghats mountain range along the Eastern coast of India, 36, 38, forests of, 39

Fastern Jumna canal, 29, 532 Ecclesiastical Department, The Indian, 266, 267

Education Commission appointed by Lord Ripon, 429, its recommendations, 429, 474

Education in India, 472 479, education in ancient India, 472, Sanskrit tols, 472, Calcutta Madi asa and other colleges, 473, Vission schools, 473, State system of education 473, 474, educational finance, 475, Indian uni versities, 475, 476, colleges, 476, upper, middle, and primary schools, 476, 477, girls' schools, 478, 479, normal and other special schools, 479, educational classification of the popu lation, Appendix IX, 698 702

Flephants, domestic and wild, 521 655, elephant catching a Government mono poly, 655, 656, Elephant Preserva

tion Act, 656 Elgin, Loid, Viceroy of India (1862 63), 424

Ellenborough, Earl of, Governor General of India (1842 44), 408, 409, the Afghan army of retribution under (enerals Nott and Pollock, 408, 409, Ellenborough's Somnath proclamation, 409, conquest and annexation of Sind, 409, Gwalior outbreak, and the battles of Maharajpur and Punniah,

Ellichpur, Muhammadan kingdom of Southern India (1484 1572 AD), 288 Elhot, Sir Henry, Tribes of the North 11 estern Provinces, 195 (footnote 2), History of India as told by its our Historians, 271 (footnote), 272 (foot notes 3 and 4), 273 (footnote), 287

(footnote 2), 290, 291 (footnotes), 295 (footnote 1), 300 (footnote), 302 (footnote), 306 (footnote 2), 313 (foot note 1)

Elphinstone's History of India, quoted, 175 (footnote 2), 180 (footnote 2) 273 (footnote), 291 (footnote), 300 | (footnote 2), 302 (footnotes), 306 (footnote 1)

Embden East India Company - Se PRUSSIAN AND EMBDEN EAST INDIA COMPANIES

Embroiders work, 603

English in India, The (1496 1689 A D ' Attempts to reach India pp 363 377 by the North West passage, 363 Thomas Stephens the earliest recorded English traveller in India (1579 A D) 363, 364 Fitch, Newberry, and Leedes (1583 AD) 364, first Charter of the East India Company (1600 A D ), 364, later Last India Companies 365, the amalgamated Company (1709 AD), 365, early English voyages to India (1600 12 AD), 365, 366 British defeat of the Portuguese fleet at Swallv (1615 AD), 306, Sir Thomas Roe, British Ambassador to India (1615 A 1), 367, wars between Eng lish and Dutch, 367 368 massacre of Ambovna, and expulsion of the British from the Fastern Archipelago 368 early In han factories in India, 367, 368, Madras founded (1639 AD), 309, Hugh Balasor, and Kasimbazai factories, 369, 370, Bombay ceded to the British (rown (1661 a D), and Presidency transferred thither from Surat (1684 87 A D), 370 Bengal separated from Madras (1687 AD), 370, Sir John Child, first 'Governor General,' 370, 371, Fig hish oppressed in Bengal by the native Vicerois 371, the Company starts on territorial sway (1689 AD), 371, causes of England's success in India and of the fulure of other European powers, 377

Ethnical division of the population, 51 52 **,** 73, 74

European and Indian languages merely varieties of Arvan speech, 76

European Settlements (1498 to 18th cen tury A D ), chap xiv pp 356 377 The Portuguese in India, 356 361, early Portuguese voyages, Covilham (1487 A D ), and Vasco da Gama (1498 AD), 357, 358, state of India on arrival of Portuguese, 358, Portuguese territorial expedition (1500 A 1) ), 358, Portuguese supremacy in the Eastern Seas (1500 1600 A D), 358, 359, capture of Goa by Albuquerque

(1510 A D ), 359, Portuguese crueltus, 359, Albuquerque's policy of concilia tion, 359, 360, later Portuguese Vice roys, their oppressions and conquests, 360, downfall of the Portuguese in India (1639 1739), 360, 361 Portu guese possessions in 1881, 361, mixed The Dutch in India descendants, 361 (1602 1824), 359 362, Dutch East India Companies, 361, Dutch supre macy in the Eastern Seas (1600 1700 AD), 362, their brilliant progress, but short slighted policy and ultimate downfall 362, Dutch relics in India, The early English in India 363 363 371 attempts to reach India by the North West passage, 363, Thomas Stephens, the fir t authentic Figlish traveller in India (1579 1 1) 1, 363,364 later travellers Fitch, Newberry and Leedes (1583 AD) 364 first Charter of the Fast India Company (1600 A D ) 364, later Fast India Companies (1635 1655, and 1698 4 D), 365, the amalgamited Company (1709 A 1) early English vovages (1600 12 10), 365, defen of the Portuguese fleet at Swally, off Suint (1615,, 366 Sir Thomas Roe first English Ambus sador to India (1615 x 1) 1 367 treats with the Dutch (1619 AD), 367 Figlish expelled from the Spice islands and Java by the Dutch (1620 21 A D) 367, establishment of English factorics nt Agra and Paini (1620 4 11), 367 Ma ulipat in factory established (1622 A D), 368, Inglish expelled from Eastern Archipelago, and retire to India, 368 Imperor's Jarman grant ing English liberty to trade in Bengal 368, 369, Madras founded (1639 AD), 369 Ilugli factory established (1640 AD), 369, Kasimbazai factory (1658 AD), 369, 370, Rombry ceded to the british Crown (1661 A D), 370 Presidency removed from Surat to Bombay (1684 87 A D) 370, separa tion of Bengul from Mudras (1681) 370, Sir John Child, first 'Governor General' (1686 AD), 370, 371 General' (1686 AI), 370, 371 Calcutta founded (1686), 371, the Company embarks on territorial sway (1689 A D), 371, French East India Companies and possessions in 1881, 372, Danish, Scotch, and Spanish Companies, 372, the German or Ostend Company, 372, its Indian settlements (1772 AD), 373, its successful experimental voyages and political objects, 373, 374, Ostend Company bankrupt and destroyed (1783 84 A.D.), and extinguished (1793 (A D), 374, the Prussian and Embden Companies, 374 376, Swedish Com pany (1731 A D ), 376, causes of fail ure of foreign European Companies, and of English success in India, 376, 377, European traders in India in 1872 and 1881, 37

Everest, Mount, peak of the Himalayas, and highest measured mountain in the

world, 5 Everest, Rev Mr, calculations regard

Exchange, Loss by, 469

Excise administration, distilleries, rice beer, opium, gánjá, charas, 454, 455, 467, expenditure and income of British India, 465 470

Lacommunication from caste privileges, 199, 200

Lxecutive Council of the Governor

General, 432

Export trade of India, its origin and growth, analysis and principal staples of, 567, 569 580, distribution of exports to different countries, 569, 580, coasting trade, 584 586

External sources of the ancient history of India, 163

# F

Fa Hinn, Chinese Buddhist pilgrim of the 5th century A D , 155 I runne relief expenditure, 469 ramines, 539 544, causes of scarcity and of real famine, 539 means of husbanding the water supply, irrigation area, 540, 541, summary of Indian famines 541, 542, the great famine of 1876 78 its causes, 542, 543, famine expenditure, 543, mor tality from disease and starvation, 543, 544, famine a weak check on popula tion, 544 Faulmann, Buch der Schrift, quoted, 103 (footnote) Fauna of India, 10 -See also ZOOLO(1, 652 662 Female education, 478, 479 Ferre Nature of India - See LOOI OCI AND BOTANY Ferdousi, Persian poet and historian in the days of Mahmud of Ghazni, 275 Fergusson, Mr James, Paper in the Journal of the Royal Assatic Socrety for April 1880, quoted, 147 (footnote) Tree and Serpent Worship, quoted, 185 (footnote 4), 204 (footnote I), History of Architecture, 304 (footnotes) Fetish worship in Hinduism, 205, 206 Feudatory India, the thirteen groups of Native States, 43, population, 45 Filatures — See SILK

Final Struggles of the French in India, by Colonel Malleson, 379 (footnote) Finances and taxation of India, obscuri ties and changes in system of account, 457 465, taxation of British India, 459 461, taxation under the Mughals and under the British, 462, 463, taxa tion in Native States, 464, inci dence of taxation in British India, 464, 465

Firishta's Rise of the Muhammadan Power in India, Colonel Briggs' tran lation, quoted, 271 (footnote), 287 (footnote 2), 291 (footnotes)

Firozshahr, Battle of, 411

First Buddhist Council (543 B C), 143 Firuz Tughlak, the third king of the Tughlak dynasty (1351 88 AD), his great canals and public works, 285 Fishes, 661, 662

Fitch, Newberry, and Leedes, the first English traders in India (1583 AD),

Flint weapons of ancient India, 53

Flora of India, 662 664

Food grains, Export of, 571 573

Forde, Colonel, recapture of Masulipatam

from the French (1759), 385
Foreign trade of India, its gradual growth, 561 581, returns of foreign trade (1840 84), 562 564, staples of import and export sea borne trade (1882 83), 565 581

Forest Department, Growth of, and 1 s administration, 522 528, Forest Conservancy statistics, 526, 527, 'open' and 'reserved' forests, 526
Forests of the Himalayas, 8, in Southern

and South Western India, 38 40 in Sind and Punjab, 524, 525, North Western Provinces, 525, Sundarbans, 525, Assam and Burma, 525, 526 —See also Forest Department, ut supra

Fortified weaving settlements of the East India Company, 599

Fourth Buddhist Council (40 A D ), 147 ro wei kian king, Chinese translation from the Sanskrit of the 'dying instruc

tions of Buddha,' 141 and footnote Fox, The Indian, 654

France, India's foreign trade with, 578,

579 French East India Companies, and the present French po sessions in India, 372, French and English in the Kni natile, the first French war (1746 48), 378, capture of Madras by the French (1746), and its restoration to the Eng lish (1748), 379, French influence in India (1798 1800), and intrigues with Tipu Sultan and the Nizam of Haidar abad, 394, 395

Frobisher's, Davis', Hudson's, and Baffin's

attempts to reach India by way of the North West passage, 363 Frontier trade of India, 585 590 Fruits, Varieties of, 490 Funeral mounds and ceremonies of the Sakyas and Buddhists in ancient India, 178

## G

Gaekwar, family name of the chief of the Maiatha Stre of Baroda, rise of the family deposition of the late Gaekwar, 322, 323 426 Game birds of India 659 660

Gandamak, Treaty of, 426 Ganges, The 11, 1632 its river sys tein and course, 16, 17 discharge, 17 sanctity, 17, 18, the fertilizer and highway of Rengal, 19, 20, traffic 20, great cities, 20, 21 ditterent stages in the life of the Ganges or any great Indian river, 21 25, as a silt collector, 21, 22 as a land maker, 22, 23, section of a deltaic channel | Ghor, Dynasty of (1152 1206 A.D.), of the Ganges, 23 combined delta of the Ganges, the Brahmaputra, and the Meghna, 24 25, subterranean struc ture of the Gangetic delta, 26 and i footnote, silt brought down by Ganges! at Ghazipur, 27 and footnote, esti mated silt of united river system 28, age of the Bengal delta, 28, river irrigation, 28, the Ganges and Jumna Canals, 28, 29 Gauges floods 29, saline deposits, 29, changes of Ganges channel, 30, deserted over capitals, 30, the bore of the Ganges and Meghna, 30, 31 the Goalanda rul way station washed away by the Ganges, 31, 32, fluvial changes aliu vion and diluvion, 30 32, navigation on the Ganges, 552

Ganges Canals, 28, 29, 532, 533 Gangetic historical and commercial cities, 20, deserted cities, 30

Ganja, Excise duty on, 455

Gaulis, an ancient ruling race in the Central Provinces, now a crushed tribe,

Gautama Buddha, the founder of the Buddhist religion, his life and doctrine -See BLDDHISM

Geography of India - See PHYSICAL ASPECTS

Geology of India, chap xxii pp 631 640 Geology of the Himalayis, 631, the central gnessic axis, 631, 632, lower Himálayas, 633, the sub Hima layas and Sivaliks, 632, 633, the Salt Range, 633, Indo Gangetic plain, its age, history, and geological deposits,

633, 634, peninsular India 634 639 the Vindhya system, 635, Gondwana series, 635, 636, Panchet and Talcher group, 636, 030, Panchet and Talcher group, 636, Damodar series and coal helds, 636 638, Deccan trap and laterite, 638, 639, precious stones, 639, geological structure of Burma, 639, 640

Ghakkars, a tribe in Rawal Pindi Dis trict, their invisions of India, and their

present descendants 185

Ghats, Eastern, mountain ringe along the Eastern coast of India, 36, 38,

furests of, 39

Ghats, Western, mountain range along the Western coast of India 36, the Bhor Chat pass, 36, Thal Chat pass, Palghat pass, 37 rivers of the Western Ghats, 37, 38, rainfall, 38, forcits, 39

Gheriah, defeat of Mir Kasim at, by

Major Adams, 386

Ghivas ud din Lughtak, founder of the Tughlak dynasty (1,201324 AD),

283

Muhammad of Ghors invasions, his first defeats and ultimate conquest of Northern India and Bengal, 275 278

Gibbon's Decline and Fall of the Roman Empur., quoted, 230 (footnote 1), 239

(footnote 2)

Gingi, Surrender of, by the French to hir Eyre Coote, 380

Gipsy clans, 71 Girls' schools, 478, 479 Gita Govinda, The, or 'Divine Herds

man, the song of Krishna, 128 Goa, Supposed relics of St Thomas at, 238 John de Albuquerque, first bishop of (1539 53 AD), 244, establish ment of Archbishopric of, 245, Arch bishop Menezes (1596 99), 245, jurisdiction of the Goa Archbishopric, 255, 256, capture of Goa by Albu querque (1510 A D ), 359

Goalanda railway station washed away by the Ganges, 31

Godavari river, 37, irrigation works, improvement of navigation on, 551,

Goddard, General, his march across India during the first Maratha war,

Golconda, Diamonds of, 41, 628 Golconda, Muhammadan kingdom of Southern India (1512 1688 A 1), 288 Gold and gold mining in Southern India, 624, 625

Gold and silver, imports of, 562, 568,

569

Goldsmith caste in Madris, 196

Goldsmiths' and jewellers' work, 605, 606

Gold washing in Indian rivers, 624 Gonds, aboriginal tribe in the Central Provinces, 55, 71, 187, 189 Gondwana, Geology of, 635, 636

Gough, Lord, battles of Chilianwala and Gujrat, 412, 413

Governors, Governors General Viceroys of India (1757 1885 AD),

Grammar of the Sindhi Language by Dr E Trumpp, quoted, 335

'Grand Army, The, of Aurangzeb, and its twenty years' campaign in the Deccan, 308, 309

'Grand Irunk Road' of India, The, 550

Grant Duff's History of the Mirathas, quoted, chap x11 pp 317 324, foot notes passim

Greek influence on Indian art and archi

tecture, 112, 170, 171

Greeks in India, The (327 to 161 BC), chap vi pp 163 173 Early Greek writers, 163, Megasthenes, the Greek Ambassador to the Court of Chandra Gupta, 163, 164, Alexander the Great's expedition to India, 163 166, his defeat of Porus, 164, 165, his advance through the Punjab and Sind, 165, 166, cities founded by Alexander, 164, 165, results of his Indian expedition, 166, Greek military settlements, 166, cession of the Punjab and Sind to Chandra Gupta by Seleukos, 167, Me gasthenes' embassy to Chandra Gupta's Court, 163, 164, 167 the India of Mega-thenes, 168 170, ancient petty Indian kingdoms, 170, Indo Greek treaty (256 BC), 170, later Greek invasions of India, 170, Greek influence on Indian ait, 112, 170, 171, Greek and Hindu types of sculpture, Greek in Bengal, 172 Greek survivals in India, 172, the Yavanas, 172, 173

Growth of trading and industrial cities under the English, 556, 557

Guaranteed railways, the eight great lines of, 546, 547

Gujrat, Battle of, 413

Cunny bags, Exports of, 576, 614 616 Gupta, ancient Indian dynasty in Northern India (319 470 AD), their struggle with and overthrow by an invasion of Scythians or White Huns, 182

(iúrkhas, War with the (1814 15), 400, services during the Mutiny, 421

Gwalari, mountain pres over the Biahul hills from the Punjab into Baluchistan,

H

Haas, Dr E, 'Ueber die Ursprunge der Indischen Medizin, mit besonderem Bezug auf Susruta,' and 'Hippokrates und die Indische Medizin des Mittel alters,' published in the Zeitschrift der Deutschen Morgenlandischen Gesell schaft for 1876 and 1877, quoted, 110 (footnote)

Hab river, the westernmost boundary of India, separating Southern Sind from

Baluchistan, 3, 6, 7

Haidar Alf, his wars with the British,

Hala mountains, a southerly offshoot of the Himalayas, marking a portion of the western boundary of India, 3

Hand loom and steam mill woven cotton,

Hardinge, Lord, Governor General of India (1841 48), 410, 411, history of the Sikh and of the first Sikh war, battles of Múdki, Firozshahr, Aliwal, and Sobraon, 410, 411

Hardy, Mr Spence, Manual of Buddhism, quoted, 137 (footnotes)

Harris, General, storming of Seringa

patam, 397 Hastings, Marquis of, Governor General of India (1814 23), 400 402, war with Nepal and treaty of Segauli, with cession of Himalayan tracts (1815), 400, Pindari wai, 401, third and last Maratha war and annexation of the

Peshwa's dominions (1818), 401, 402 Hastings, Warren (1772 85), 388 392, his administrative reforms and policy towards native powers, 388, first Governor General of India (1774), 388, makes Bengal pay, 389, sale of Allahabad and Kora to the Wazır of Oudh (1773), 390, the Rohilla war, plunder of Chait Singh and the Oudh Begams, 390, 391, Hastings impeach ment and seven years' trial in England, 391, the poor excuse for his measures, 391, first Maratha war and treaty of Salbai, 391, 392, Mysore (1780 84), 392 first war with

Haug, Dr , The Origin of Brahmanism, quoted, 212 (footnote 4)

Havelock, Sir Henry, defeat of the Cawnpur mutineers, first relief of Luck now, 420

Hawkins, Captain, Envoy from James 1 and the East India Company to the Court of the Great Mughal (1608 A D ), 366

Heber, Bishop of Calcutta (1823 26), 261

Hekataios, the earliest Greek historian who refers to India, 163.

High Courts of Justice in India, 433
Hijili navigable canal in Midnapur
District, 553

Hill cultivation, 9, 486

Hill forts (Maratha) in the Deccan, 318 Himalaya mountains, The, 4 10, the double wa'l and trough, 5, 6, passes and offshoots, 6, water supply and rainfall, 7, scenery, vegetation, irrigation and products, 7 10 animals and tribes, 10, geology, 631 633, meteorology, 641, 642 — See also Trans Himalayan Trans.

Hindi literature and authors, 345, 346 Hinduism, Rise of (750 to 1520 AD), chap viii pp 192 228 Disinte gration of Buddhism, 191 preaching of Kumarıla, 191 persecution of Buddhism, 191, 192, caste and reli gion the twofold basis of Hinduism, 192, race origin of caste, 192, modi fied by 'occupation' and 'locality, 192 complexity of caste, 192, 193 the Brahman caste at alvzed, 193, 194, building of the caste system 194, Hindu marriage law, 195 ancient mingling of castes, 195, 'occupation basis of caste 196 199, the Vaisjas or ancient cultivating caste, 196, the 'right hand and left hand castes of Madias, 196, 197, the Dattas of Bengal, 197, Shahas, Telis, and Tambulis forcing their way to higher castes, 197, reaste, a system of trade guilds, 197, 198, working of the Indian trade guild, its funds, charities, rewards, and punishments, 198, 199 excommunication a penalty for a bitach of caste rules, 199, 200, the ren gious basis of Hinduism, its sages of evolution, and how far influenced by Buddhism, 200, 201, Beast hospitals, 201, monastic religious life, 201, 202, analogies of Japanese worship to Hinduism and Christianity, 202, serpent ornamentation in Buddhist, Hindu, and Christian art, 202, 203, coalition of Buddhism with earlier religious, 203, shrines common to various faiths, 203, 204, non Aijan elements in Hinduisir, 204, phallic emblems in Hinduism, 204, 205, fetish worship in Hinduism, 205, 206, the Salgiam or village detty, 206, jungle rites, 206, 207, non Aryan religious rites merging into Hinduism, 207, Brah man founders of Hinduism, 207, low caste apostles, 207, 208, mcdreval Hindu saints, their miracies, 208 kabirs death, 208, Brahman religious reformers, 209, 210, growth of Siva-worship, 210 215, Siva worship in its philosophical and terrible aspects,

211, twofold aspects of Siva and of Durga his queen, and their twofold sets of names, 211, 212, human sacri fices as late as 1866, 212, 213, animals substituted for human sacrifice, 213, the Charak pujá or swinging festival, 213, the thirteen Sivaite sects, 213, 214, gradations of Siva worship, 214, 215, secret orgies of Sivaism, 215, the 'right hand and 'left hand forms of Siva-worship, 214, 215, Siva and Vishnu compared, 215, Vishnu the Preserver always a friendly god, 215, his incarnations or avatars. 215 (and footnote), 216, the Vishnu Puranas, 216, 217, Brahmanical and popular Vishnuism, 217, Vishnuite religious reformers, 217 222, Rama nuia, 217, Ramanand, 218, Kabir, 218, 219, Chastanya, 219 221, Vallabha Swami, 221, 222, Krishna worship, 222, 223, the twenty chief Vishnuite sects, 223, theistic move ments in Hinduism, 223, the Sikhs, and Nanak Shah their spiritual founder, Jagannath, the coulition of 22,, Brahman and Buddhist doctrines forming the basis of Vishnu worship, 223, 224, Car festival of Jagannath, 224, bloodless worship of Jagannath, self immolation a calumny, 224 226, gentle doctrines of Jagannath, 226, religious muxus of Hinduism, 226, practical faith of the Hindus, its toler ance, 226, 227, the modern Hindu triad, 227 recapitulation, 228

Hindu architecture, 112 Hindu kingdoms of the Deccan, 286 Hindu population of India, 51—See also

Appendix V, 693

Hindu Tribes and Caster, by the Rev

M A Sherring, quoted, 193 (footnote
1), 194 (footnotes 2, 3, and 4), 195

(footnote 2) 221 (footnote 4)

Historie du Christianisme des Indes, by
La Croze, 2,2 (footnote 1), 240
(footnote 4), 241 (footnote 1), 242
(footnotes)

Histoire de la Interature Hindouse et Hindoustanie, by Garcin de Tassy, 343 and footnote

History of Architecture, by Mr J Fer

gusson, quoted, 304 (footnotes)
History of British Rule (1757 1885 AD),
chap xv pp 378 430 Madras, the
first British territorial possession in
India (1639), 378, Southern India
after the death of Aurangreb (1707),
378, French and English in the
Karnatik, 378, first French war and
capture of Madras by the French
(1746), 379, second French war (1750
61), 379, Clive's defence of Arcot

(1751), 379, Sir Eyre Coote's victory of Wandewsh (1760), 379, capitulation of Pondicherri and Gingi, 380, the English in Bengal (1634 96), 380, native rulers of Bengal (1707 56), Murshid Kuli Khan, Ali Vardi Khan, and Sıraj ud daulá, 380, 381, capture of Calcutta by Sıraj ud-daulá (1756), 381, recapture of Calcutta and battle of Plassey, 382, Mir Jafar (1757 61), 383 385, Zamindari grant of the Twenty four Parganas, 383, Chee's Ingur, 383, 384, Chee, Governor of Bengal, 384, deposition of Mir Jafar and enthronement of Mir Kasım (1761), 385, Mir Kasım's quarrel with the English, and massacre of Patna, 385, 386, first Sepoy Mutiny (1764), 386, battle of Baxar (1764), 386, Chive's second Governorship 386, Clive's second Governorship (1765 67), partition of the Gangetic Grapt of Beneal, valley, the Diwani grant of Bengal, and reorganization of the Company's service, 386, 387, dual system of ad ministration (1767 72), abolished by Warren Hastings, 387, 388, Warren Hastings' administration (1772 85), 388 392, his administrative reforms, and policy with native powers, 388, Warren Hastings, the first Governor General of India (1774), 388, his financial administration, and sale of Allahabad and Kora to the Wazir of Oudh, 389, 390, withholds the Emperor's tribute, 390, the Rohilla war (1773 74), 390, plunder of Chait Singh and of the Oudh Begams, 390, charges against Histings and his impeachment, 392 the first Maratha and Mysore wars, 392, 393, Lord Corn wallis' administration (1786 93), his revenue reforms, the Permanent Settle ment of Bengal and second Mysore war, 393, 394, Sir John Shore (1793 98), 394, Lord Wellesley s administra tion (1798 1805), 394 399, French influence in India, 394, state of India before Lord Wellesley, 395, Lord Wellesley's scheme for crushing French influence in India, 395, 396 treaties of Lucknow and with the Nizam 396, third Mysore war and fall of Seringa patam, 396, 397, Wellesley's dealings with the Maratha, and the second Maratha war, 397, 398, British victories and annexations (1803), British dis asters, Colonel Monson's retreat, and General Lake's repulse before Bhartpur (1804 05), 398, India on Lord Welles ley's departure (1805), 398, 399, Lord Cornwallis' second administration as Governor General (1805), 399, Sir George Barlow (1805), 399, Earl of Minto's administration (1807 13), his embassies to the Punjab, Afghánistán, and Persia, 399, 400, Marquis of Hastings' administration (1814 23), the Nepál war and treaty of Segauli, the Pindari campaign, the third and last Maratha war, and annexation of the Peshwa's territories, 400 402, Mr Adam, pro tem Governor General (1823), 403, Lord Amherst (1823 28), Burmese encroachments on India, first Burmese war and annexation of Assam, Arakan, and Tenasserim, 403, 404, capture of Bhartpur, 404, Lord William Bentinck (1828 35), his financial re forms, abolition of Sati, suppression of Thage and cruel rites, renewal of Com pany's Charter, Mysore taken under British administration, and Coorg annexed, 404 406, Sir Charles Metcalfe (1835 36), the grant of liberty to the Press, 406, Lord Auckland (1836 42), our early dealings with Kabul, and the disastrous Afghan campaign, and annihilation of our army, 406 408, Earl of Ellenborough (1842 44), the Kabul army of retribution, the 'Gates of Somnath' travesty, annexation of Sind, and Gwalior outbreak, 408, 409, Lord Hardinge (1844 48), the first 51kh war and annexation of the Cis-Sutley tract, 410, 411, Earl of Dalhousie (1848 56), 411 417, his administrative reforms and public works, 452, second Sikh war and annexation and pacification of the Punjab, 412, 413, second Burmese war and annevation of Pegu, 413, 414, Lord Dalhouse's dealings with the Name States, the doctrine of 'Lapse in the case of Satara, Jhansi, and Nagpur States, 414, 415 Berar handed over by the Nizam of Haidara bad, as a territorial guarantee for arrears of subsidies and for the pryment of the Haidarabad contingent, 415, anneva tion of Oudh and Lord Dalhousie's grounds for the measure, 415 417, Larl Canning (1856 02), 417 424 the Sepoy Mutiny and its causes, 417 419, the outbreak at Meerut and Delhi, and spread of the Mutiny, 419, loyalty of the Sikhs, 419, 420, the siege of Cawnpur and massacre of the survivors, 420, Lucknow, 420, 421, siege and capture of Delhi, 421, re duction of Oudh by Lord Clyde, and of Central India by Sir Hugh Rose, 421, 422, India transferred to the Crown, the Queen's Proclamation and general amnesty, 423, 424, Lord Canning s financial and legal reforms, 424, Lord Elgin (1862 63), his death at Dharin-

sala, 424, Lord Lawrence (1864 69), the Bhutan war and Orissa farnine, 424, 425, Lord Mayo (1869 72), the Ambala Da lar, internal and finan cial reforms, and abolition of inland customs lines, his assassination, 425. Northbrook (1872 76), the Bengal famine of 1874, dethronement of the Guekwar of Baroda, and visit of the Prince of Wales to India, 425 426, Lord Lytton (1876 80), Proclamation of the Queen as Fmpress of India, famine of 1877 78, the second Afghan campaign, 426, 427, Lord Ripon (1880 54), end of the second Afghan campaign, rendition of Mysore to its hereditary Hin lu dynasty, internal administration reforms, local Govern ment Acts, amendment of Criminal Procedure, reconstitution of the Agri cultural Deputment, revenue reforms, the Education Commission, abolition or customs duties, Bengal I enancy Bill, 427 429, Eul of Dufferin (1884), annexation of Upper Buima (1886) 430

Mill, His ony of British India by J quoted, 314 (footnote 3), 365 (foot

note 2)

History of India, by the Hon Mount stuart Elphinsione, quoted, 270 (foot note), 291 (footno e), 300 (footnote), 302 (foo notes), 306 (footi ote 1)

History of india as told by its oun Historians, by Sir Henry Elliot, quoted, 271, 287 (footnote 2), 291 (footnotes), 295 (footnote 2, 300 (footnote), 302 (footnote, 302 (footnote, 305 (footnote), 313 (footnote, History of the Settlements and Trace of

the Europeans in the East and Ilist Inare, by Abbe Raynal, quoted, 374

(footnote)

History of the French in India, by Colonel Malleson, 379 (footnote)

Instory of the Marathas by James Grant Duff, quoted, chap xii pp 317 324, footnotes, passim

History of the Marathas, by E Scott Waring quoted, 317 (footnote 1)

Hinen Tsiang, Chinese Buddhist pilgrim, 2, 155 and footnote, 156, 157, 178, 179, 182

Hog, wild, The, 656, 657

Holkar, family name of the Chief of the Maratha State of Indore, rise of the family to power, 322, war with the British, 323 Horses, Dre ds of, 520, Government

studs, 520, horse fairs, 521 Hugh, Last India Company's factory established at (1640), 369, oppressed by the Mughal governor, 370

Human sacrifice among the Kandhs, 62, in Siva worship, 212, substitute of animals for human offerings, 213

Humayun, second Mughal Emperor of Delhi (1530 56 AD), 290, 291, expulsion from India by his Afghan governor of Bengal (1540), 291, sub sequent recovery of the throne by the second battle of Panipat, 291

### I

Ibrahim Lodi, Defeat and overthrow of, by Babar at the first battle of Pampat

(1526 v i) , 290 Imad Shahi Muhammadan dynasty of Southern India (1484 1572), 258

Immobility of the Indian peasant, 47 Impedancats to improved husbandry, namely wint of cattle, want of manuic, and want of water 517 519

Import trade of India, analysis and principal simples of, 565 568, coasting

imports and exports, 584 586 Incarnations of Vishnu, 215, 216 and footnote

Income and expenditure of British India, 465 470

Increase of population between 1872 and

1881, 47, 49, 50 Independent Nayaks and Palegars of Southern India 288

India on the cre of the Mughal conquest (1526 A D ), 290

India, origin of the name, 1 3 Indian Caste, by Di J Wilson, quoted, 194 (footnote 1), 195 (footnote 1),

196 (footnote 1) Indian products mentioned in the Bible,

163 Indian Society as described by Megas thenes (300 B C), 168, 169

Indian vernaculars and their literature, 325 355 chap xiii pp 325 355 Asiatic civilisation of India as found by the early Luropean powers, 325, 326, India in the 1st and the 16th centuries A D, 326, 327, the Dravidians or non Ary ins, their language and its place in philology, 326 328, the Dravi drans in Sanskrit literature, 328, pre Aryan Dravidian civilisation, 328, Brahmanic influence on the Dravidians, 329, 330, development of Dravidian speech into vernacular literatures, 330, the Tamil language, 330, 331, Jain cycle of Iamil literature, 331, the Tamil Rámayani, 331, 332, Sivaite and Vishnuite I amil hymnology, 332, 333, modern Tamil writers, 333, Beschi, the Jesuit Tamil scholar, 333, recent statistics of Tamil literature,

333, Aryan languages of North India, Sanskrit, 334, 335, evidence as to whether Sanskrit was ever a spoken language, 334 336, Panini and Vara ruchi, ancient Sanskrit grammarians, 336, the Prakrits or ancient spoken dialects of India, their divergence from Sanskrit, 336, routes of Prakrit speech, 337, Prakrits developed by Buddhists for their Scriptures, 338, evolution of modern vernaculars from Prakrits, 338, 339, their Prakrit framework and banskrit enrichments, 339, non Aryan element in the vernaculars, propor tion of non Aryan words, 340, 341, the fourfold composition of the verna culars, namely, the Prakrit and aborigi nal elements, Sanskrit borrowings and Persian terms, 342, the seven verna culars of India, 342, 343, vernacular literature and vernacular writers, 343, 344, Rajputana religious literature, 344, Hindi authors from the 12th to the 19th centuries, 345, 346, Marathi literature and authors, 346, Bengali Interature, its three periods, 343 348, Bengali religious poetry, 349 351 Bengali poets from the 16th to the 18th centuries, 349 352, the court of Nudiya, the chief seat of learning in Bengal in the last century, 352, Bengali prose literature in the 19th century, 354, the Bengalı drama,

Indigo, Cultivation of, in different localities, 495, 496, systems of indigo planting, and out turn in Bengal and Behar, 497, export of, 497, 574

Behar, 497, export of, 497, 574

Indische Alt. rthumskunde, by Professor

Lassen, quoted, 161 (footnote 1), 191
(footnote 2), 340 (footnote 2)

Indo Aryan stock, its European and Eastern branches, 75, 76, their march towards and into India, religion, etc, 76, 78

Indo Gangetic plain, Geology of, 633, 634, meteorology of, 643, 644

Indo Greek treaties (306 and 256 B C ), 167, 170

Indra, the Vedic God of Rain, 80, 81, influence of the runy season on Aryan mythology, 80, Indra displaced by the modern Brahmanical Triad, 81

Indus, great river of Northern India and Sind, 11 13, its upper waters, 11, its feeder the Sutlej, 11, 12, its inundations, 11 lower course, 12 irrigation facilities, 13 529, silt de posits, 13, Indus steam flotilla recently broken up on completion of the railway system, 552

Inlaying work, 609

Inquisition established by the Portuguese

at Goa (1560), 241, 253, autos da fé, 254, abolished (1812), 254 Inscribed pillars of Asoka, 145, 146 Insects, Indian, 662

Internal and local trade of India, 591 596, village money lenders, travelling brokers, and religious fairs, 592, 593 internal trade the safeguard against famine, 593, normal action of internal trade, 594, provincial statistics of internal trade, 594, 595, trade statistics of a large town, village mart, and annual fair, 594 596

Introduction to the Malto Language, by the Rev E Droese, quoted, 327 (foot note 1)

In tu, the Buddhist derivation of the word India, 2

Invaliding, Causes of, in the European army, 681

Iron mining and smelting, difficulties of Indian ironworks, 41, 619, indigenoumethods of iron smelting, 618, failure of binglish efforts, 618, 619, Government efforts, 619

Ironwork, 606
Irrigated area in different tracts with

statistics, 528 538
Irrigation from hill streams in the Hima layas, 9, river irrigation in the plains,

28, 29
Iswar Chandra Vidyasagar, famous modern IIndu social reformer, 353
Italy, India's trade with, 578, 579
Itinerary Jesuit missionaries in the 15th and 16th centuries, their labours and

conversions, 250, 251, Ivory carving, 609

### J

Jackal, The, 654. Jackson, Lowis D'A, *Hydraulu Manual*, quoted, 17 (footnote)

Jacobi, Hermann, The Jaina Sutias, forming vol xxii of Prof Max Muller. Saired Books of the East, 161 (foot notes 4 and 5), 167 (footnote 1)

Jacobite branch of the Syrian Church in India, 242 243 257

Jagannath, Worship of, 223 226, his Brahmanical and Buddhist origin, 224, the Cur festival, 225 English calum nies against Jagannath, self immo't tion seldom practised, 224, 225 his bloodless worship and gentle doctrines, 225, 226

Jahangir, fourth Mughal Emperor of India (1605 27 A D ), 300 302, chief events of his reign, 300 (footnote 2), rebellion of his son hah Jahan, 301, his Empress Nur Jahan, 301, personal character, justice and religious tolera tion, 301, 302

Jai Singh, Raja of Jaipur, his astro nomical observatories at Jaipur, Delhi, Benares, Muttra, and Ujjain in the 18th century, 105, 106

Jail statistics, 472, vital statistics of

Indian prisons, 684, 685

Jams, the modern representatives of the Buddhists in India, 158, Jain population in India, 158 (footnote), Jain doctrines, 159, temple cities, 159, relation of Jamism to Buddhism, 159, 160, antiquity of the Jains, 160, date of the Jain scriptures, 161, the Jain, an independent sect, 162, modern Jainism, 162

Jaipal, Hindu chief of Lahore his defeats by Subuktigin and Mahmud of Ghazni,

272

Talal ud din, the first king of the Khilji dynasty (1290-95 A.D.), 280

Jama Masjid, Shah Jahan's great mosque

at Delhi, 304

Jamuna, the name of the Brahmaputra from its entering the Bengal delta to its junction with the Ganges, 14.

Jang Bahadur, assistance rendered by, during the suppression of the Mutiny,

Jats, The, their Scythian oligin, 179, 180

Java Conquest of, by Lord Minto, 300 Jayadeva, a celebrated Sanskrit poet of the 12th century, 128

Jazza, or Mughal polltax on non

Musalmans, 309

Je-uits in India, 244 255, first Portuguese missionaries (1500 A D), 244, St Francis Xavier, 244, 245, the Madras Jesuits, 245, letters of the early Jesuit missionaries, 246, Thana, a Jesuit station (1550 AD), with its colony of Christian artisans and culti vators, 247, 248, rural organization of the Jesuits, 248, the Jesuit college at Cochin, 248 250, Jesuit itinerary missionaries, and their conversions, 250, 251, Jesuit missions in Malabar in the 17th and 18th centuries, 251, 252, Jesuit martyrdoms, 252, 253, literary labours of the Jesuits, 253, establishment of the Portuguese inquisition at Goa (1560), 251 253, autos da fê, 253, 254, abolition of the inquisition (1812), 254, the Jesuits suppressed (1759 73), 254, 255, re established (1814), 255

Jewellery and goldsmiths' work, 605,

Jewish settlements in ancient Malabar, 234, 235

Jhansi, Native State, lapsed to the British

for want of heirs, 415, revolt of the ex princess in 1857, 421, 422

Jones, Sir William, 114, 126

Josaphat, a saint of the Christian Church, analogies between him and Buddha, and asserted identity of the two, 151 152

Journal Assatique, Paper by M Senart,

quoted, 175 (footnote 3) Journalism and newspapers, 480 luangs, a leaf-wearing tribe in Orissa, 56 Jumna, great river in Northern India, and chief tributary of the Ganges, 17

Jumna Canal, Eastern, Statistics of, 29, 532, 533

Jumna Canal, Western, Statistics of, 29, 531

Jungle products, tasar silkworm, lac. etc, 34, 513 515

Jungle rites in Hinduism, 206, 207

Jute, Cultivation of, 494, 495, export of raw and of manufactured jute, 495, 570, 571, 576, 615, steam jute mills, 614 616

## K

Vishnuite religious reformer Kabir, (1380 1420) claimed as a saint by both Hindus and Muhammadans, 208, his doctrines, 218 219, coalition of Vish nuism with Islam, 219, Kabir's religi ous poetry, 345

Kaders, aboriginal tribe of the Anamalai

Hills, Madras, 55

Kailas, sacred mountain in Tibet, and the watershed from which the Indus, Sutley, and Brahmaputra take their rive, 11, 13

Kaimur, range of mountains in Central India and Bengal, an offshoot of the Vindhyas, 35

Kalanos, the Brahman at Alexander's court, 169

Kalí, the non Aryan form of the wife of Siva, 211, 212

Kalidasa, famous Hindu poet and dra matist (56 BC), 125, his drama of Sakuntala, 126

Kanauj, ancient city, now deserted by the Ganges, 30, court pageant at, in the 12th century A.D , 276

Kanchanjanga, mountain in the Hima

layas, 5

Kandahar, wrested from the Mughal Empire during the reign of Shah Jahan, 303, occupation of, during the first Afghan campaign (1839), 408 defeat of Ayúh Khán at, in the second campaign (1880), 427

Kandlis, aboriginal hill tribe of Orissa and northern Madras, 60 63, their patriarchal government, 60, wars and punishments, and blood revenge, 60,61, agriculture, 61, marriages by capture, 61, serfs attached to their villages, 61, 62, human sacrifices, 62, the Kandhs under British rule, 62, 63

Kanishka, Buddhist king in North Western India (40 AD), his great Council, 147, 148, 175, 176, 178 Kankar, or nodular limestone, 628, 638

Karagola, large trading fair, 596, 597

Karakoram, pass over the Himalayas on the trading route from the Punjab into eastern Turkistan, 6

Karengs, an aboriginal tribe of Burma and Siam, 71

Karharbarı coal field, 637

Karma, Buddhist doctrine of, 141, 142 Karnatik, The, English and French wars in, rival English and French candidates for the throne of Arcot (1746 61), 379, 390

Karnul canal purchased by Government from the Madras Irrigation Company,

536, 537

Kartabhajas, a reformed Vishnuite sect in the Districts around Calcutta, 223

Kashmir shawis, Weavi g of, 603 kasimbazar, East India Company's factory established at (1658), 369, the chief emporium of the Gangetic tiade in the middle of the 18th century, 380 hasims expedition and temporary con-

Kasım's expedition and temporary con quest of Sind (711 714 A D ), 268

Kası Ram Das, Benguli poet of Bardwan District, and translator of the Maha bharata (17th century), 351

bharata (17th century), 351 kauravas, their quarrel and struggle with the five Pandavas, as related in the Mahábharata, 119, 120

Kaveri (Cauvery) river, 37 irrigation works, 536, 537

works, 536, 537 Kennet, keyerend Dr, St Thomas the Apostle of India, quoted, 233 (footnote 3), 235 (footnote), 237 (footnote 4), 239 (footnote 1)

Keshava Das, Hindi poet of the 16th century, and composer of the Ram chandrika, 345

Khubar, mountum pass into Afghanistán from the Punjab, 6

Khandesh, Annexation of, to the Mughal Empire by Akhar, 294

Khasis, an aboriginal tribe of Assum, 71 (footnote)

Khili dynasty, The (1290-1320 A D), 280 283, Jalal ud din (1290 95), 280, Ala ud din (1295 1315), 281, 282, Mughal mercennies and Hindu revolts, 282, 283, Khusru, renegade Hindu Emperor (1316 20), 282, 283

Khusru Khan, renegade Handu emperor of the Khilji dynasty (1316 20 AD),

282, 283

Kiernander, Danish Piotestant missionary, 260

Kiiki, attack on by, and repulse of, the Marathás (1817), 402

Kirtibas Ojhá, Sivaite religious poet of the 16th century, 349, 350

the 16th century, 349, 350 Kistvaen builders of ancient India, 53 Koch, an aboriginal tribe in Noithern

Bengal, 187, 188

Kolarians, aboriginal races of Bengal and Central India, 64 68, their con vergence in Central India, 64, their dispersion, 64, 65, scattered Kolarian fragments, 65, Kolarian languages, 65 68

Koros, Alexander Csoma de, Life and Works of, by Dr I heodore Duka, quoted, 153 (footnote 2), Journal Assatic Society of Bengal (1833), quoted, 175 (footnote 1)

Krishna worship, 222, a religion of pleasure, 222, 223, love songs, 223,

hymn to, 348, 349

Kshattriya or warriot caste of ancient India, 89, 94 growth of the caste, 89 91, struggle between the priestly and warrior castes, 92 94, casts of Kshattriyas attaining Brahmanhood, 92, 93, legendary extermination of the Kshattriyas by Parasurama, the sixth incarnation of Vishnu, 94

Kumarıla, a Brahmanıcal religious re former (750 AD), 191, 209, 329,

\_ 330

Kuram, mountain pass into Afghanistan from the Punjab, 6

Kushtia, river station of the Eastern Bengal Railway terminus removed owing to silting of Ganges, 30 Kutab ud din, the first of the Slave

Kutab ud din, the first of the Slave dynasty, and the first resident Muham madan sovereign in India (1206 10

A D), 278 Kutub Shahi, Muhammadan dynasty in Southern India (1512 1688 A D), 288

# L

La Bourdonnais, capture of Madras by a French squadron under the command of (1746) 379 Labour and land, Relation between, in

former times and at the present day in

India, 48, 49

La Croze's Histoire du Christianism des Indes, 232 (footnote I), 240 (footnote 4), 241 (footnotes 1 and 3), 242 (footnotes)

Lac industry, 513, 515, export of lac and lac dye, 575

Lake, Lord, victories over the Maráthas at Laswari and Dig, 323, 398

Lakshman Sen, last independent Hindu king of Bengal, his overthrow by Muhammad of Ghor (1203 AD),

Lal Kavi, Hindi poet of Bundelkhand in the 17th century, and author of the Chhatra Prakas, 245

Chhatra Prakas, 345 Lally, Defert of, at Wandewash by Coote (1761) 379, 380, siege and surrender of Pondicherri and Gingi 380

Land making powers of deitaic rivers, 22 25, 27

Land revenue of India under the Mughals, 297 299, 304, land revenue of british

India, 452

Land Settlement, 438 452 uncient land settlement of India 4,8 Musulman land tax, 439, the Company's efforts at land settlement, 439, growth of private rights, 439, the Permanent Settlement of Bengal (1793), 441, rights of the cultivators at d intermedia a e tenure holders, 442, 443, oppression of the cultivators 54, land reform of 1859, 443, 444 the Rent Commission (1879), and further schemes for reform 444, 445, temporary Settlement in Orissa 445, Vaerly Settlement in Assam, 445, Vadras rayata at Settlement, 445, 447, survey tenure of Bombay, 448, 449, Southern India Agriculturists R-lief Acts (1879 and 1881), 449, 450, land system of the Central Provinces, 452, the lund revenue of India, 452 nature of the land tay 469

Languages Arvan, of Northern India, Sanskrit, 334, the evidence for and against Sanskrit ever having been a spoken language, 334, 336, divergence of Sanskrit and Prakrit, 336 spread of the Piakrits, 336, 337, classification of Prakrits—Vaharashti of Marathi, the Sumasom or the Braj of the North Western Provinces, the Magadhi or modern I than, and the Passachi of modern vernaculars from the Prakrits, 338, 339, the Sanskrit, Prakrit, and non Aryan elements in modern vernaculars, 339, 342, the seven modern vernaculars, 339, 342, the seven modern vernaculars, 342, 343, vernacular literature and writers, 343, 354

I anguages of non Aryan tribes, 63 68, the Dravidian languages of Southern India, Tamil, its principal develop

ment, 330 333

Lassen, Induche Alterthumskunde, quoted 161 (footnote 1), 191 (footnote 2), 340 (footnote 1)

Laswari, Delcat of Holkar at, 323, 398

Laterite, 628, 638, 639

Law and Custom of Hindu Castes, by

Mr Arthur Steele, quoted, 195 (foot note 2)

Law, Brahmanical codes of, 113 118, the Grihya Sutias an outgrowth from the Vedas, 113, code of Manu and its date, 113, 114, code of Vajnavalkya, 114, 115, scope of Hindu law, 115, its nigul caste system, 115, 116, growth of the law, 116, its incorporation of local customs, 117, perils of modern codification, 117, 118, modern legal literature, 118

Law, The of British India, 433 434
Lawrence, Lord Vicetov of India (1864
69), famine in Orissa, Bhutan war,
inquiry into the status of the Oudh
peasintry, the commercial crisis of
1860, 424, 425

1866, 424, 425
Lawrence, Major his ineffectual siege of
Pondicheri in 1748 in co operation
with the Linglish fleet under Admiral

Boscawen 379

Lawrence, Sir Henry, Resident at Lahore (1845), 410, Chief Commissioner of Oudh, 415, killed at Lucknow (1857), 420

Lewl, 626

Leaf wearing tribe of Oussa 56

Lenther work, 603, leather factories at Campur, 417

Left hand and Right hand castes of Madias, 196, 197

Legislative Council of the Governor General, 432, of Maulas, Bombay, and Bengal, 433

Leopard, The Indian, 653, 654

Liniestone, 41, 42, 627 028 Lion, The Indian, or maneless, of Gujarat,

Litrature of Bengal, The, by Mr Arcy Dae, quoted, 347 and lootnote, 348, 349, and footnote, 352 (footnote)

Literature of India, 118 129, 343 354, and 480, 481, the Mahabharata, 118 122, the Ramavana, 122 124, later Sanskrit epics, 124 125, Valnuki, the author of the Ramayana, 123, the poet Raidsa, 125, the Sanskrit drama, 125, 126, the Hindu novel, 127, Beast stories and fables, 127, Sanskrit lyric poetry, 128, the Puranas or Bhahmanical mediaval theological writings, 128, 129, modern Indian literature, 129, Uniya literature and authors, 343, 344, Rapputana sacred literature, 344, Hindi literature and authors, 345, 346, Bengali literature and authors, 345, 346, Bengali literature and authors, 345, 346, Bengali literature and authors, 345, 346, 880, 481

Local finance, 470
Local and internal tride, statistics of,
592 597

I ocusts, 662 Lodi dynasty, The (1450 1526 AD),

Loss by exchange, 469

Love poems in Krishna worship, 223 Low caste apostles in religious reforma tions in Siva and Vishnu worship, 207, 208

Lower Ganges Canal, Statistics of, 29,

532, 533 Lucknow, Siege and relief of, 420 421 Lucknow, Withdrawal of English factory at, 369

I utheran Missions, 259, 260

Lyell, Sir Charles, Principles of Geology,

quoted, 27

I ytton, Lord, Viceroy of India (1876 80). Proclamation of the Queen as Empress of India, great famine of 1877 78, second Afghan wai, 426, 427

# M

Macaulay, Lord, first Law Member of the Council of India, 406

Macnaghten, Sir William, Assassination of, at Kabul (1839), 408 Madhava Acharya, a Sanskut religious

writer of the 14th century 191 Madhu Rao, fourth Maratha Peshwa

(1761 72), 321 Madhu Rao Narayan, sixth Maratha

Peshwa (1774 95) first Maratha war, and trea y of Salbai, 323 Madhu Sudin Datta, Bengali epic poet

of the 19th century, 354 Madras, founded in 1639, the first term torral British possession in India, 369, 378, capture of, by the French, in effectual siege of, by the English, restoration to the British, 379

Madrasa, Muhammadan College of Cal

cutt1, 473

Mahabharata, the epc poem of the heroic age in Northern India, 118 122, the struggle between the Kaura vas and Pandavas, 119, 120, the

polyandry of Draupadi, 121

Mahmud of Ghazni (1001 30 AD) 272 275, his seventeen invasions of India, 272, 273, patriotic resistance of the Hindus, 273 sick of Somnath, 273, 274, conquest of the Punjib, 274, Vahmud's justice and thrift, 274, 275

Mahmud Tughlak, last king of the Tugh lak dynasty (1398 1414 A D ), invasion

of I mur (Tamerlane), 285
Mulapur (St Thomas' Mount), legend
ary martyrdom of St Thomas the Apostle at, near Madras city, 231 Makum coal beds in Assam, 621

Makunda Rám, famous poet of Bardwan in the 16th century, story of Kalketu the hunter, 350, 351, the Srimania

Sadágar, 351

Malabar Christians, legendary preaching of St Thomas the Apostle on the Malabar and Coromandel coasts (68 A D ), 229, Thomas the Manichean and Thomas the Armenian merchant, their rival claims as founders of Chris tianity in Southern India, 231, 232, troubles of the ancient Indian Church, 240, the St Thomas Nestonan Chris tians of Malabar, a powerful and respected military caste, 240, 241, Por tuguese efforts at their conversion to Rome, 241, incorporation of the St Thomas Christians into the Roman Catholic Church, and downfall of the Nestorian Church, 241, Synod of Diamper (1599 AD), 241, Malabar Christians under Jesuit prelates (1601 to 1653 AD), 241, 242, Malabar Christians freed from Jesuit supre macy by the Dutch conquest of Cochin (1563), 242, first Jacobite Bishop to Malabar (1665), 242, 243, Malabar Christians since 1665, their division into Syrians and Jacobites, and present numbers, 243, tenets of the Jacobites of Malabar, 243 Nestorianism extinct in Malabar, 243, 241, the Jesuit Malabar Mission in the 17th and 18th centuries, 251, caste among Malabar Christians, 251, 252 letters of the Jesuit missionaries of Malabai,

Malabar na igable back waters or la

goon, 553

Malik Kafur, slave general of Ala ud din (1303 15 A D), his conquest of Southern India, 282

Malleson, Colonel, History of the French in India, and Final Strugglis of the French in India, by, quoted, 379 (foot note)

Mammalia of India, 652 659

Manchester cotton imports, 565\_568 'Man hunts' of Muhammad Tughlak, 284, 285

Man Singh, Al bar's Hindu general and governor of Bengal, 293

Manu, the legendary founder of Sanskrit lau, 113, 114

Manufactures and Arts -See ARTS AND MANUFACTURES

Manue, Use of, 483, want of, a draw back to improved husband v, 518

Maiatha power, The (1634 1818 AD), chap x11 pp 317 324 British India won, not from the Mughals but from the Handus, 317, rise of the Maratha, Shahji Bhonsla, 317, Sivaji,

the consolidator of the Maratha power, 317, state of parties in the Deccan, (1650), 318, the Marathas courted by the two rival Muhammadan powers, 318 Sivaji's hill forts, army of cavalry, tactics, etc., 319, his murder of the Bijapur general Akbar Khan, 319, coms money in his own name, 319 visits Delhi (1666), 319, enthrones himself as an independent prince at , Raigarh (1674), 319, death (1680), 319, Aurangzeb's mistaken policy in the Deccan, 319, Sambhan and Sahu, successors of Sivaji, 319, the Satara and Kolhapur families, the last of Sivaji's line, 320, rise and progress of the Peshwas, 320, second Peshwa (1721 40), conquers the Deccan, 320 third Peshwa (1740-61), conquests in the Deccan, and raids from Bengal to the Punjab, 320, 321, defeat of the Marathas by Ahmid Shah the Afghan (1761), 321, fourth Peshwá (1761 72), 321, the five great Maratha branches, 321, fifth Peshwa (1772), his as-assination, 321, decline of the Peshwas (1772 78) 321, 322, the northern Marathas, Sindhia and Holkar (1761 1803), 322, the Bhons las of Beiar (1751 53), 322, the Gaekwars of Baroda 322, 323, the sixth and seven h Peshwas (1774 1818), and the three Maratha wars, 323, 324, end of the Peshwas (1849), 324

'Maratha Ditch,' The, moat constructed partly around Calcutta as a protec tion against the Marathas,

321

Maratha wars, the first (1778 81), 323, 391, the second (1802 04) 398, third and last, annexation of the Peshwas dominions (1818), 323, 402

Marathi literature and authors, 346 Marble carving, 112, marble building

stone, 628

Marco Polo, by Colonel Yule, quoted, 152 (footnote I), 231 (footnote I), 233 (footnotes 1 and 2), 237 (foot note 4), 239 (footnote 3), 356 (foot note)

Mar Gregory, first Jacobite Bishop to the Syrian Church in India, 242, 243

Marias, aboriginal tribe in the Cential Provinces, 55

Maris, abonginal tribe in the Central Provinces, 55

Marriage law of the Hindus, 195, 196 Martyrdoms of Jesuit missionaries, 252,

253 Masulipatam, East India Company's fac tory established at (1622), 368,

temporarily abandoned (1628) but re established under a farman from the King of Golconda (1632) 368, murder of the Company's factors at (1689), 371, recapture of, from the French, 385

Mathematics, Brahmanical system of, 105

Maurinus, India s trade with, 578, 579 Mausoleums, 112

Mayo, I arl of, Vicetoy of India (1869) 72), 425, 426, the Ambala darbar, visit of the Duke of Edinburgh, administrative reforms, abolition of customs lines, assassination at the Andaman Islands 425, his scheme for Indian feeder lines of railway, 445, 446

Mayur Pandit, Marathi religious poet

of the 18th century, 346
M'Crindle, Mr J W M, Commerce and
Assignment of the Erythrean Sea, quoted, 166 (footnotes 1 and 2), 356 (fostnote), Ancient India as described by Migasthenis and Arrian, quoted, 168 (footnote 1), 356 (footnote)

Means of communication, chap xviii pp 545 554 History of Indian railways, 545, Lord Dalhousies trunk nailway lines, 545, Lord Mayos branch or feeder lines, 545 546, the four classes of Indian iailways 'Guar 'Assisted,' 'State,' antced, 'Native State, 546 549 statistics of Indian railways, 549, 550, roads, the Grand Frunk Road, extension of minor roads, 550, 551, road metal, 551, bridges of boats, 551, navigable rivers, 551 553, navigable canals, 553, 554

Mediæval trade of India, 555 Medical colleges in India, 109

Medicine and drug, 34, Brahmanical system of medicine, 106 110, its in dependent development, 4th to 5th century, 107, scope of Indian medicine, 107, Indian surgery, 107, 108, bud dhist public hospitals, 108, 109, decline of Hindu medicine, 109, English Medi cal Colleges, 109, vernacular medical literature, 109, 110

Medlicott and Blanford, Geology of In ita, quoted, 27 (footnote), 631 640

Meerut, outbreak of the mutiny at 419 Megasthenes, Seleukos ambassador to the court of Chandia Gupta, 154 163, his description of India and of Indian society (300 B C), 167 170, division of India into petty kingdoms, 170

Meghna, the eastern estuary of the united waters of the Brahmaputra and Ganges, 15, 21, 28, its 'bore' or tidal wave,

31, the Meghna delta, 25

Mehidpur, defeat of Holkar at, in the last Marathá war (1817 18) 402

Memoir of the War in India, conducted by General Lord Lake, by Major William Thorne, quoted, 317 (footnote 1)

Metcalfe, Lord, Governor General of

India (1835 36), 406

Meteorology or 641 655 of India, chap Meteorological geo graphy of the Himalayas and Punjab frontier, 641 643, the Indus plain, and great Indian desert, 643, Gan getic plain and Eastern Bengal, 643, 644, the Central Indian and Southern plateaux, 644, 645, Anamalai Hills 645, southern coast strip and Ceylon, 645, 646, Burma 646, solar radia tion, 647, air temperature, atmo spheric pressure, wind, humidity, 647, 648, rainfall statistics, 649, 650, sun spot cycles, 650, 651

Mhans aboriginal tribe in Rajputana, 72, 73

Miani, Defeat of the Sind Mirs at, by Sir C Napier (1843), 409

Mic1, 628

Middleton, first Bishop of Calcutta (1814),

Middleton Sir Henry, his naval defeat of the Portuguese at Cambay (1611),

Migration of the people, 47

Military caste of St Thomas Nestourn Christians, 240, Portuguese efforts at their conversion to Rome, 241

Military Transactions in Indostan, by Orme, quoted, 379 (footnote), 380

(footnote 2)

Mill, James, History of British India, quoted, 314 (footnote 3), 365 (foot note 2), 379 (footnote), 383 (foot note)

Millets, Statistics of cultivation of, and chief varieties, 487, 488, 489

Mills by water power in the Himaliyas 9 Mineral oils 42, petroleum wells and oil refining companies in Burma 626 627, petroleum in Assam and the Punjab, 627

Minerals and Mines -See MINES AND

MINERALS

Mines and Minerals, chap xxi pp 618 630 Indian iron, indigenous methods of working, 618, failure of English efforts, 618, 619, Government efforts, 619, Indian coal and history of Bengal coal mining (1820 83), 619, 620, the Central Provinces and Bengal coal fields, 620, 621 coal beds in Assam, 621, future of Indian coal, 622, salt mining and manufacture, 622, 623, saltpetre, 623, 624, gold washing, 624, gold mining in Madras and

Mysore, 624, 625, copper mining, 626, lead, tin, antimony, and cobalt, 625, 626, petroleum in Burma, Assam, and the Punjab, 626, 627, lime and building stone, 627, 628, marble, 628, slate, 628, diamonds and precious stones, 628, 629, pearl fisheries, 629 -See also GEOLOGY OF INDIA.

Miniature painting, 113

Minto, Earl of, Governor General of India (1807 13), expeditions to Javi and Mauritius, embassies to the Punjab, Afghanistan, and Persia, 359,

Mir Jafar, Nawab of Bengal (1757 60), compensation for losses at Calcutia, grant to the Company of the zamindán of the Twenty four Parganas, Clive's jagir, dethronement of Mir Jafar, 383, 385

Mir Juinla's unsuccessful expedition to Assam in the reign of Aurangzeb

(1662), 309

Mir Kasım, Nawab of Bengal (1760 63), grant of Bardwan, Midnapur, and Chittagong to the Company, his quarrel with the English, massacre of Patna, and defeat at Ghenah and Udhanala, 385, 386

Miracles of Budahist and Hindu religious founders, 139, 140, 208, miracles of the early Jesuits, 252

Miscellaneous Essays, by Mr B II Hodgson, 340 (footnote 1)

Missionary efforts of Asoka, 146

Missions, Christian, in India — See CATHOLIC MISSIONS, CHRISTIANITY IN INDIA, PROTESTANT MISSIONS

Mixed population, 51 Model farms, the small success hitherto attained, 515, 516

Mohpani colliery in the Central Pro vinces, 620, 621

Mona, Earlof — See HASTINGS, MARQUIS

Monasteries (Hindu), 201, 202

Monopoly, Salt, 453, opium, 455 Monson, Colonel, his retreat before Holkar, 398

Monze, Cape, and promontors in Sind, marking the extreme western boundary of British India, 3

Mornington, 1 ord -See WELLESLEY, MARQUIS OF

Moti Masjid or Pearl Mosque in Agra Fort, 304

Mudki, Battle of, 411

Mughal Empire, The (1526 1761 AD), chap x1 pp 290-316 State of India in 1526, 290, early life of Babar (1482 1526), 290, invasion of India and defeat of Ibrahim Lodi at Panipat, 290, Babar's conquest of Northern India,

(1526 30), 290, Humáyún (1530 56), his expulsion from India (1540), and reconquest by the second battle of Pánipat (1556), 290, 291, and foot note, Akbar the Great (1556 1605), 291 300, Akbar's work in India, 292 and footnote, conciliation of the Hindus, 293, extension of the Muzhal Empire, and reduction of the Rajputs (1561 68), 293, Akbar's Hindu officers, Rajás Man Singh and Todar Mall, 293, Akbar's reform of Hindu customs, 293, reconquest of Bengal and sub jugation of Muhammadan States, 294, change of capital from Delhi to Agra, 294, annexation of Khandesh in the Deccan, 294, Akbar's death, 295, his religious principles and new faith, 295, Akbar's reorganization of the army, police, and judicial administration of the Empire, 296, his revenue system and land revenue, 296, 297, and foot note, large totals of Mughal taxation, 298, 299, Jahangir (1605 27), 300 and footnote, Rajput revolts, 301, the Empress Nur Jahan, 301, Jahangir s personal character, justice, and religion, 301, 302, Shah Jahan (1628 58), 302 305, loss of Kandahar, 303, Mughal conquests in the Deccan, 303, 304 Shah Jahan's buildings, the Taj Mahal, the Jama and Moti Masjids, and palace at Delhi, 304, 305, rebellion of Prince Aurangzeb, and deposition of Shah Jahán (1657 58), 305, revenues of Shah Jahan, 305, Aurangzeb s usurpa tion and reign (1658 1707), 306 312, murder of his brothers, 307, rise of the Maratha power, 307, 308, Amangrebs southern campaign and twents years war with the Marathas, 308, Aurang zeb's 'Grand Army' worn out in the struggle (1705) his despair and death (1707), 308, 309, Mir Jumla's disastrous expedition to Assam, 306, Aurangzebs bigoted policy, and oppression of the Hindus, 309, revolt of the Rajputs, 309, 310, Aurangzebs revenues and land tax, 310, 311, character of Aurangzeb, 312, decline and fall of the Mughal Empire, the six puppet kings (1707 20), 312, 313, independence of the Deccan, of Oudh, and of the Rajput States, 314, oppressions of the Sikhs, 314, the Maratha chauth, 314, Persian and Afghan invasions from the north, 314, 315; third battle of Panipat (1761), and fall of the Mughal Empire, 315, the last of the Mughals (1862), 316 Juhammad of Ghor, the first king of the Ghor dynasty in India (1186 1206),

275 278, his conquests in Northern

India and overthrow of the Rájput clans, 275, 276, subjugation of Bengal and defeat of its last independent Hindu hing (1202 A.D.), 277, 278

Hindu king (1203 AD), 277, 278

Muhammad Tughlak, second king of the Tughlak dynasty (1324 51 AD), 283 285, expeditions to the south, 283, his cruelties, enforced change of capital, revolts, revenue exactions, 284, 285, 'man hunts,' 284, 285

Muhammadan architecture, 112, 304

Muhammadan architecture, 112, 304 Muhammadan conquest of India only partial and temporary, 270

Muhammadan population of India, 51, also Appendix V, 693

Muhammadan States of the Deccan (1489 1683 AD), 288

Mur, Dr John, Sanski tt Texts, quoted, 81 (footnote 2), 84 (footnote 3), 94 (foo note), 212 (footnote 4), 334 (foot

notes I and 2)
Mulberry cultivation in Bengal, 513

Mules, 521

Muller, Professor Max, History of Sanskrit Literature, translation of Rig Veda, 83 (footnotes I and 2), 84 (footnotes), 85 (footnote), Chips from a German Workshop, 83 (footnote I), 127 (footnote 3), 142 (footnote 2), 151 (footnote 2), Contemporary Review for July 1870, 151 (footnote 3), Sacred Books of the East, vol xu, the Jama Sutras, by Hermann Jacobi, 161 (footnotes 4, 5, 6, 7, and 8)

Mundas, an aboriginal tribe of Kols in Chutia Nagpur, 71 (footnote)

Mundavers, a wandering pastoral tribe in the Anamalai Hills, 55

Municipal administration and statistics, 455 457, 470

Munio, Major (afterwards Sir Hector), Suppression of the fir t Sepov Mutinv by, 386, defeat of the Imperial and Oudh armies at the battle of Baxar, 386

Munro, Sir Thomas, introducer of the ráyatwari system of land settlement in Madras, 446

Murshid Kuli Khan, Nawab of Bengal, his transfer of the capital from Dacca to Murshidabad, 380, 381

Music, Hindu, 110 112, peculiarities of Indian music, 111, its modern revival, 111, 112

Muslin manufactures of Dacca and Madras, decline of industry, 602, 603 Mustagh, pass over the Himalayas on

Mustagh, pass over the Himalayas on the trade route from the Punjab into Lastern Turkistan, 6

Mutiny, The, of 1857 58, 417 421, its causes, 417, 418, outbreaks at Meerut and Delhi, 419, spread of the revolt, 419, lovalty of the Siklis, 419, mas sacre at Cawnpur, 420, siege and

relief of Lucknow, 420, 421, siege of Delhi, 421, reduction of Oudh, 421, campaigns of Sir Colin Campbell (Lord Clyde) and Sir Hugh Rose (Lord Strathnaum), 421, 422

Myrobalams, Export of, 574, 575

Mysore, First war with, against Haidai Ali (1780 84), 392, second Mysore war (1790 92), 394, Tipús intrigues with France, and the third Mysore war (1799), 396, fall of Senngapatam, and death of Tipu in the breach, 397, Mysore taken under British administra tion and protection, 406, rendition of, to its ancient hereditary Hindu ruleis, 427, 435

## N

Nabhaji Das, Hindi poet of the 16th century, and author of the Bhaktamala, 345

Nadir Shah's invasion of India and sack

of Delhi, 314. Nadiya rivers, Engineering works to keep open the navigation of, during the dry season, 552, 553

Naga Hills, the most easterly offshoot of the Himaiayas, 3

Nagas or scrpent worshippers, Ancient dynasties of, 185, 186, 204

Nagpur, the territories of the Maratha Rhonsla family lapsed to the British for want of heirs (1853), 415

Nairs, tribe of south western India, their polyandry, 55

Nalanda, famous Buddhist monastery of

the 7th century A D, 157 Nam Deva, Marathi poet of the 13th century, 346

Anna Sahib, his proclamation as Peshwa at the outbreak of the Mutiny, and the massacre of the Cawnpur garrison, 420

Nanak Shah, the founder of the Sikh

religion, 223, 410 Napier, Sir Charles, conquest of Sind

by (1843), 409 Arrayan Rao, fifth Maratha Peshwa (1772), his assassination, 321

Nairative of Political and Military Transactions of British In ha under the Marquis of Hastings, by Henry T Prinsep, quoted, 317 (footnote 1)

Native States of India, their relation to the British paramount power, 43, area and population of the thirteen groups of States, 45

Nats, a semi Hinduized gipsy tribe of Lower Bungal, 71

Natural calamities — See FAMINES

Navigable canals, 553, 554 Nayak and Palegar chiefiains of Southern India, 288

Nelson, Mr J, Hindu Law as admini stered by the High Court of Judicature at Madras, quoted, 117 (fuotnote 1), 195 (footnote 2)

Nepal, War with, 400, Gurkha assist ance in the Mutiny, 421, trade with,

587 589 Nestorianism among early Indian Chris tians, 236, its wide diffusion, 236, 237, its suppression and downfall, 241 243; Nestorian remnants, 242,

243 Nicholson, Gereral, his death at the

storm of Delhi, 421

Nikaia, town founded by Alexander the Great and identified with the modern town of Mong in Gujrat District, 165 Nil Darpan, a famous modern Bengali

play, 127, 354

Nilgai or blue cow, 657 Nilgir hills in Southern India, 36 Nirvana, Budahist doctrine of, 142

Nızam Shahı, Muhammadan dyrastv ın Southern India (1490 1636 A D ), 288 Nobilis, Robert de, founder of the Madras

Jesuits (1606 56), 245 Nomadic cultivation, 9, 47 48, 522

the ments and destructiveness of nomadic tillage 528

Non Aryan or aboriginal races, 51, 52 — See also ABORIGINAL TRILES, chap m and Appendix V, 693

Non Aryan rites merging into Hindu sm, 207

Non Asiatic population of British India, Appendix VII, 695 Normal schools, 479

Northbrook, Earl of, Viceroy of India (1872 76), dethronement of the Gaek war of Baroda, visit of the Prince of

Wales to India, 425, 426 North West passage, Attempts to reach India by way of, 363

Nott, General his maich from Kandahar to Kabul (1842), 408, 409

Numismata Orientalia (Ceylonfasc ), 167 (footnote 2)

Nur Jahan, the Queen of the Emperor Jahangir, 301

Nyaya, one of the six darsanas or Brah manical schools of philosophy, 99

### 0

Occupation basis of caste, 196, 197 Ochterlony, General, his campaigns in Nepal (1814 15), 400, 401 Oil seeds, Cultivation of, 489, export of, 573, **5**74.

Oldenbeig, Professor Hermann, Buddha, his Life, his Doctrine, his Order, quoted, 161 (footnote 3)

Opnum, Excise duty on, 455, cultivation of, in Bengal and Malwa, 498, 499, export of, 499, Bengal opium system, 499

Origin of Christianity in India, its con nection with St Thomas the Apostle,

Orresa, by W W Hunter, quoted, 91 (footnote), 173 (footnote 1), 193 (footnote 1), 193 (footnote 1), 194 (footnote 5), 215 (footnote 1), 224 (footnote 4), 225 (footnotes 2, 4, and 6), 343 (footnote 2)

Orissa Province, annexed to the Mughal Empire by Albars Hindu General, Raja Todar Mall (1574), 294 ceded to the British (1803) by the Nagpur Bhonsla on the termination of the second Maratha war, 398, the famine of 1866, 424, 542, settlement of the land revenue, 445, can'd system, 534

Orme's Military Transactions in Indos ian, quoted, 379 (footnote), 380 (foot

note 2)

Ostend East India Company established 1722, its factories at Covelong on the Madras coast, and at Bankipui on the Hugh, 372 374, political objects of the Ostend Compiny, 373, 374 de struction of the Bankipui settlement by the Muhammadans (17,3%, 374, hankruptes and downfall of the Ostend Company (1784 93) 374

Outh, Sale of Allahabad and Kora to the Wazir of by Warren Hastings (1773) 389, the Rohilla war, 390, plunder of the Oudh Begams, 390, 391

Oudh, Annexation of, 415, Loid Dal housie's justification of the measure, 416, the mutiny in, 421, inquiry into the status of the peasantry in, 424

Outrant, Sir James, his works among the Bhils of Khandesh, 72, 73, annexation of Oudh, 416, relief of Lucknow, 420 Overcrowded and under peopled districts,

46, 47

Owen, Sidney J. Selections from the Despatches of the Marquir of Wellesley, quoted, 317 (footnote 1), Selections from the Indian Despatches of the Duke of Wellington, quoted, 317 (foot note 1)

#### P

Pab hills, a southern offshoot of the North Western Himalayas, forming a portion of the boundary between India and Baluchistan, 7

Paika hi rájats, or temporary cultivators,

Painting, Indian art of, 113

Palegar and Nayak chieftains of Southern India, 288

Paighat Pass, a remarkable break or gap in the Western Chairs, 37

Palitana, sacred temple city of the Jains,

Palm leaf writings, 102 Palm, Varieties of, 491

Pandavas, the five brethren of the Maha bharata, their quarrel and struggle with the Kauravas, 119 121

Pandya, uncient Hindu dynasty in Southern India, 286

Panini, the compiler of the Sanskrit

grammar (350 BC), 100 336
Panipat, celebrated battlefield in Northern India, defeat of Ibrahim Lodi by Babar (1526 AD), 290, defeat of Afghans by Akbar and restoration of Humayun to the throne (1556 AD), 291, overthrow of the Marathas by the Afghans under Ahmad Shah Dulani (1761 AD), 315, 321

Panna, Diamond mines of, 629

Pantænus, the Alexandrian stoic, his evidence as to Christianity in India at the end of the 2nd century A D, 235

Paper making, 617

Parameswara, the one First Cause, or Supreme Deity of Hinduism 227 Parasnath, hill in Bengal, held sacred by

Farisnath, hill in Bengal, held sacred by the Jains, 35, 159

Parasurama, the sixth incarnation of Vishnu, his legendary war of extermination with the Ashattrivas, 94

Parochial organization of Portuguese India, 247

Partition of the Gangetic Valley by Clive (1765), 387

Passes of the Himalayas, the Khaibar, Kuram, Gwalan, Tal, and Bolan passes, 29, of the Western Chats, the Bhor, I hal, and Palghat passes, 36, 37

Patala, town founded by Alexander the Great, and identified with the modern city of Haidarabad, the historic capital of Sind, 166

Pathán Kings of Pelhi, by Mr E Thomas, quoted, 271 (footnote), 279, 280 281 (footnote), 283 (footnotes 1 and 2), 284 (footnote 1), 285 (footnote 3), 287 (footnote 2), 291 (footnote)

Patná, East India Company's Agency at (1620), 367, massacre of, 386, trade of, 595, 596

Pearl fisheries, 629

Pegu, Annexation of, as the result of the second Burmese war, 413, 414.

Peninsular India, Geology of, 634 639 Permanent Settlement, The, of Lord Conwallis and Sir John Shore, 393, Peshwas, the rise and progress of their power (1718 1818), 320 324, annexa tion of the Peshwas dominions, 402

Petroleum or mineral oil, 42, mines and oil refining Companies in Burma, 626, 627

Petty kingdoms of ancient India in the time of Megasthenes, 170

Phallic emblems in Hinduism, 204, 205 Philosophical and terrible aspects of Siva worship, 210, 211

Philosophy of the Brahmans, its six

darsanas or schools, 98, 99

Physical aspects of India, chap 1 pp 1 42 General outline, I, origin of the name of India, I 3, boundaries, 3, 4, the three regions of India, 4 First region, the Himalayas, 1 10 the Himalayan wall and trough, 46, Himalayan passes, 6, offshoots of the Himalayas, 6, the gateways of India, 6, 7, Himalayan water supply and rainfall, 7, scenery, 7, 8, vegetation and forests, 7, cultivation, 7, 8, 1rri gation and mill power, 9, saleable produce, 9, 10, fauna of the Hima layas, 10 Second region, the northern river plains, 10 34 The three river river plains, 10 34 The three river systems of India, 10, 11—(1) the Indus and Sutley, 11, 12 lower course of the Indus, 12, 13, (2) the Isan pu or Brahmaputra, 13 16 the Kailas watershed, 13, the Brahma putra tributaries in Assam, 13, 14, the Brahmaputra in Bengal, 14 15, Brahmaputra silt deposits and islands, 14, 15, changes in Brahmaputra course, 15, the Brahmaputra as a high road, 15, 16, (3) the Gangetic river system, 16 29, the growth of the Ganges and its discharge at different points, 17, its great imbutary the sumna, 17, sanctity of the Ganges, its places of pilgrimage, 17, 18, the Ganges as water carrier, fertilizer, and great water highway of Bengal, 19 20, traffic on the Ganges, 20, great Gangetic cities, 20, 21, first and second stages in the life of a great Indian river as a silt collector, 21, 22 loss of carrying power in second stage, 22, third stage as a land maker, 21, 22, the delta of Bengal, and of Gangetic deltaic distributaries, 23, character of a deltaic river, 23, 24, section of a deltric channel of the Ganges, 23, junction of the Ganges, the Brahmaputra, and the Meghna-their combined delta, 24, last scene in the life of an Indian river, land making in the estuary, 24, 25 Bengal, the gift of the Ganges, in the same sense as Egypt the 'gift of the Nile,

25, size of the Bengal delta, 25, succes sive depressions of the delta, 26, 27, its subterranean structure, 26 (foot note), amount of silt brought down by the Ganges at Ghazipur, 27, estimated silt of united river at the delta, 28, time required to construct the Bengal delta, 28, river irrigation by means of canals, 28, 29, the rivers as highways of trade, 29, saline deposits from canal irrigation, 29, changes of river beds and deserted river capitals, 30, the 'bore' of the Hugli and Meghna, 30, 31, destruction of river side villages, 31, 32, poetry of the Indian river names, 32, crops of the river plains of North Western Bengal and the delta, 32, 33, scenery of the river plains, 33, 34. Third region, the southern table land or the Deccan, 34 42, its three supporting mountain walls, 35, the Vindhya mountains and their ranges, the ancient barrier between Northern and Southern India, 35, 36, the Eastern and Western Ghats, 36, the central triangular plateau, 36, the Bhor Ghat 36, the Thal Ghat, 37, the Palghat pass, 37 rivers of the inner plateau, 37, 38, historical significance of the Eastern and Western Chita. Ghats, 38, rainfall of the Deccan, 38, the four forest regions of Southern India, 38 40, scenery of Southern India, 40, crops, 40, 41, minerals 41, recapitulation of the three regions of India, their races and languages, 41, British Burma, 42

Pillar and Rock inscriptions of Asoka,

145 (footnote), 146

Pindari freebooters, Expedition against the (1817), 401

Pippli, early seaboard settlement and poit of the East Incia Company now far inland, 368, 369

Plassey, Battle of (1757), 382

Police statistics, 472

Pollock, his march from the Punjab to Kabul (1842), 409

Polyandry among the Nairs and Hima layan tribes, 55, polyandry of Druu padi, the wife of the five Pandava biethren in the Mahabharata, 121, polyandry in the Hindu marriage law, 195 modern survivals of, 195

Pondicherri, Roman Catholic Mission, 259 ineffectual siege of, by Adimiral Boscawen's fleet and a land force under Major Liwrence (1748), 379, siege of, and capitulation to, Sir Eyre Coote

(1760), 380

Poona, Treaty of (1817), 402
Popham, Captain, storm of Gwalior for tress during the first Maratha war, 391

Popular Vishnuism 217 Population of India, chap 11 pp 43 52 General survey of the people, 43, the feudatory chiefs and their powers, 43, the twelve British Provinces, 44, Census of 1872 and of 1881, 44, 45, population tables of British, Feudatory, and Foreign India, 44, 45, density of the population, 46, absence of large towns, 46, overcrowded districts, 46, 47, under peopled tracts, 47, im nobility of the Indian peasant, 47, nomadic system of tillage, 47, 48, relation of labour to land in the last century, and at the present day, 48, 49, serfdom, 49, unequal division of the people, 49 50, increase of population since 1872, 50 history of India, 51, fourfold division of the people, into Aiyans, non Aryans, mixed Hindus, and Muhammadans, 51, 52, population tables for 1881, 51 (foo. note), and Appendices I A, 689 703 Portuguese in India, 356 361, Coulhain, 357, Vasco da Gama, 357, 358, Cabral, 358, Francisco de Almeida, 359, Albuquerque, 359, 360 oppressions of the Portuguese, 359, 360, downfall of the Portuguese power, 360, Portu guese Indian posses ions in 1871, 361, mixed descendants, 361, defeat of the Portuguese fleet at Swally off Surat (1615), 366 temporary expulsion of the Portuguese from Bengal, 368, 369, early Portuguese trade with India, 560 Porus, Defeat of, by Alexander the Great, 164 Post Vedic Gods, Rise of, 97, 98, the Hindu triad, 98 Potato cultivation in the Himalayas, 9 Pottery manufactures, 608, 628 Practical faith of the Hindus, its toler ance and fairness to Chr stianity, 226, Pre Aryan kingdoms in Northern India, 184, pre Aryan civilisation, 328, 329 Pre-Buddhistic Scythian influences in India, connection of the Horse Sacrifice with the Human Sacrifice of pre Buddh istic India, 175, 176, 183, 184, Scythic and Naga influences on Hinduism, and on the religions and domestic life of modern India, 189, 199
Precious metals in India, imports of treasure 562, 568, 569, gold mining, 624, 625 Precious stones, 9, 606, 628, 629, 639 Predatory hill races, their conversion from marauding tribes into peaceful cultivators and good soldiers, 71 73. Presbyterian Missions, 261 Primary education, 477, 478 Primitive Aryan burial, 85 87

Prince of Wales' visit to India (1875 76), 426
Prinsep, Henry T, Narrative of Political and Military Transactions of British India under the Marquis of Hastings, quoted, 317 (footnote)

Proclamation of the Queen as Empress of India, 426

Products and agriculture — See AGRICUL
TURE AND PRODUCTS

Protestant M1 sions in India, 259 269, first translation of the Bible into the vernacular, 260, Schwartz, Kiernander, Marshman, Carey, and Ward, 260, 261, opportion of the Company to Christian missionaries, 260, withdrawal of the Company's opposition, 260, 261, Bishopric of Calcutta, 261, statistics of Protestant Missions, 261 264

Provincial Administration, 'Regulation' and 'Non Regulation' territory, District officers and their duties, 434 437

Prussian and Embden East India Companies (1750 and 1753), Dutch and English jealousy of, and their down fall, 374 376

fall, 374 376
Public Works expenditure, 469, 470 —
See also Mean's OF COMMUNICATION,
RAILWAY SYSTEM, ROADS, CANALS,
etc

Puliars, a wild aboriginal tribe in the Anamalai Hills Madras, 55 Pulses, Cultivation of, 489

Puranas, The, their place in Indian literature, 216, 217

# R

Race origin of caste modified by 'occu pation and 'locality,' 192, 193

Raigarh, enthronement of Sivaji as an independent monarch at, in the Deccan (1674), 319

Railway system of India, mangurated by Lord Dalhousie, 545, extended by Lord Mayo, 545, 546 the eight guaranteed trunk lines, 546, 547, State and 'Assisted' railways, 547, 548, railways in Native States, 548, 549, statistics of traffic and capital invested, 549, 550

Rainfall, Himalayan, 7, Western Gháts, 38, statistics of rainfall for 435 Indian stations, 649, 650

Rajputana literature and sacred poetry,

Rajputs, their reputed Scythian origin, 180, number of Rajput castes in modern India, 194, distribution of Rajputs in the 12th century AD, 276, 277, Rajput revolts against the Slave kings, 280, against the Khilji dynasty, 282,

against the Tughlak dynasty, 284, conciliation of Raiputs by Akbar, 293, revolt against Jahangir, 301, against Aurangzeb, 309, 310

Ráma, the hero of the Sanskrit epic

Rimayana, 123, 124.

Ramanand, Vishnuite religious reformer (1300 1400 A D ), his low caste dis ciples, 218

Ramanuja, Vishnuite religious reformer

(1150 A D ), 217

Ramayana, the Sanskrit epic relating to the Aryan advance into Southern India, 121, 122, the story of Rama, his exile together with his wife Sita, the war with the aboriginal king of Ceylon, and triumphant return, 123, 124

Ram Mohan Rai, theistic religious re former and prose religious writer, 353 Ram Prasad Sen, court poet of Nadiya

in the 18th century, 352

Ranjit Singh, the founder of the Sikh

kingdom, 410, 411

Rayatward settlement of the land in | Madras, 445, 446, growth of the Madras cultivator into a proprietor, 447, extension of tillage, 447, reduc tion of average land tax, 448

Raynal, Abbe, History of the Settlements and Trade of the Europeans in the East and West Indies quoted, 374 (footnote)

Raziya, Empress of Delhi (1236 39), the only lady who ever occupied that throne, 279

Reconquest of India from the Muham madans by the Hindus (1707 61 AD),

Keform of Hindu customs by Akbar, 293 'Regulation' and 'Non Regulation

Provinces, 435

Religion of the Hindus, by Dr H H Wilson, quoted, 201 (footnote 2), 205 (footnote 1), 206 (footnote 2), 208 (footnote 2), 210 (footnote 2), 213 (footnote 1), 221 (footnote 2), 223 (footnotes 3 and 4), 225 (footnote 5)
Religious of India, by Dr Barth, quoted,

161 (footnote 2)

Religious classification of the population of British India, Appendix V, 693

Rennel, Major, map of Bengal in 1765 15 Rent Commission of Bengal (1879), and its reforms in the extension of tenant right and compensation for disturbance, 444, 445

Report on the Miscellaneous Old Records in the India Office, by Sir George Bird wood, 358 (footnote 2), 360 (footnote 1), 364 (footnotes 1 and 2), 368 (footnote), 370 (footnote)

Reptiles, 660, poisonous serpents, and deaths from snake bite, 660

by Mr E Thomas, quoted, 271 (foot note), 297 (footnote 2) 299 301 (footnote I), 304, 305 (footnote), 311 (footnotes)

Revenue system of British India, the land tax, 438 441, 452, salt duty, 453, 454, excise and opium, 453 455, muni cipal revenues, 455 457, revenue and expenditure of British India, 455 470

Revenue of the Mughal Empire under Akbar, 297 growth of the Mughal revenues (1503 1761 A D ), 269

Revue de l'Histoire des Religions, by Dr Barth, quoted, 161 (footnote 2)

Rhinoceros, The Indian, 656

Rice cultivation in Bengal, 32, 33, in other Provinces of India, its numerous vaneties, 485, out turn, 485, 486, export of, 572, export duty on, 573 Right hand and left hand castes of

Madras, 196, 197

Rig Veda, the earliest Sanskrit hymnal, 77, 88, its antiquity, 77, 78, caste and widow burning unknown, 78, the story of the Aryan advance into India, 79, Arvan civilisation in the Veda, 79, the gods of the Veda, 7981, Vedic con ceptions of the Deity, the modern blood loving gods unknown, 82, Vedic hymns and prayers, 84,86, primitive Aryan form of burial, 84, cremation substituted for burial, 84, 85, Vedic legend of Yama, the king of death, 85, the Vedic farewell to the dead, 85 86

Ripon, Marquis of (Viceroy of India, 1880 84), conclusion of the Afghan war, amendment of criminal procedure, revenue reforms, Education Commission, abolition of customs duties, Ben

gal Tenancy Bill, 427 429 Rise of the Maiatha power, 307, 308 -See also chap x11, 'The Maratha

Power, 317 324

River communications, 15, 16, 19, 20,

River plains of India, 10 34, the great rivers Ganges, Jumna, Inclus (with Sutley), and Brahmaputra, 11 20, the different stages in the life of an Indian river, 21 23 the Bengul delta and process of land making, 23 28 rivers as irrigators and highways, 28, 29, destructive floods, 29 32 poetry of Indian river names, 32, crops and scenery of the river plains and the Bengal delta, 32 34

River systems of Northern India, 10, 11,

of Southern India, 37, 38

River traffic on the Ganges and Gangetic channels, and of the port of Calcutta,

Revenue Resources of the Mughal Empue, Roads, old military toutes, the Grand

Trunk Road,' inland route from Bom bay, extension of minor roads, 550, 551 Roberts, Sir Frederick, his march from Kabul to Kandahár and defeat of

Ayub Khán, 427 Rock Edicts of Asoka, 144, 145 (foot-

note), 146 and footnote

Rockhill, Mr W Woodville, Life of the Buddha, and the early History of his Order, derived from Tibetan works, and translated by, quoted, 137 (foot note 2), 138 (footnote 2), 154 (foot note 2), 160 (footnote 2), 176 (foot note 1), 177 (footnotes)

Roe, Sir Thomas, first British Ambassador to India, in the reign of Jahangir (1615 a.D), 301, 367

Rohilkhand and Bunaur canal, 533

Rohilla war, 390 Roman Catholics, Distribution of, in India, 257, the Verapoli vicariate, 257, Roman and Syrian Catholic population of India, 257 259, Catholic progress, colleges and schools, 257 259 - See also CATHOLIC MISSIONS

Roman trade with India (190 A D), 234. Rose, Sir Hugh (Lord Strathnairn), campaign in Central India, 421, 422

Rotation of crops, 483 Roth, Professor, Indische Medicin, Karaka' published in the Zeitschrift Deutschen Morgenlandischen Gesellschaft je 1872, quoted, 110 (footnote)

Rural population, 46, proportion of town to rural population, 46, number and population of villages and towns,

Appendix II, 690

## S

Sacred Books of the East, by Professor Max Muller, quoted, 161 (footnotes 4,

5, 6, 7, and 8,

Safed Koh, mountain range forming a portion of the western boundary between British India and Afghanistan, 3,6

Safflower, Export of, 574

Sa ar Island at the mouth of the Ganges, a celebrated place of pilgrimage, 17, 18 Sahu, son and nominal successor of Sam bhaji, 319, 320

Saidapet, Government model farm at, in Madras, recently closed, 516, agri

cultural school at, 516

Saka or Scythian era 178 A.D.), 181 Sakhi Sarwar, place of pilgrimage in the Punjab, sacred both to Hindus and Muhammadans, 203, 204

Sakta or Tantrik sect of Siva worshippers,

214

Sakuntalá, famous Sanskrit drama, 126. Sakya race customs, 178

Salbai, Treaty of, 323, 392 Salim, Prince, Akbar's favourite son and successor as the Emperor Jahangur, 300 302

Saline deposits from canal irrigation, 29 Salivahana, King of Southern India, his wars with the Scythians, 181

Salt administration, 452, sources of supply and systems of manufacture, 453, 454, the Madras monopoly, 453 equalization of duty, 453, 454, yield of salt duty, 468, the Rajputana salt lakes, and Punjab salt mines, 622, 623 Saltpetre, Manufacture of, 623, 624

Salt range, Geology of, 633

Sama Veda, The, 88 Sambalpur, Diamonds of, 628

Sambhan, son and successor of Sivan, put to death by Aurangzeb, 319 Samvat and Saka eras (57 and 78 AD), 181

Sanctity of the Ganges, 17, 18 Sandwip island, Slavery in, 49

Sankara Acharya, a Sivaite religious re former (9th century A D ), 209, 210

Sankhya, one of the six darsanas or Brahmanical schools of philosophy 99 Sanskrit Grammar, by Professor Whitney,

334 (footnote 1)

Sanskrit grammar and literature, 100 104, 334 336, Panini s grammar, 100, 101, Sanskrit and Prakrit speech, 101, Sanskrit manuscripts, 101, 102, the Indian Alphabet, 102, 103, Sanskrit writings almost entirely verse, 103, prose a forgotten art, 103, 104, Sans krit dictionaries, 104, evidence as to whether Sanskrit was ever a spoken vernacular, 334 336

Sanskrit Texts, by Dr John Muir, quoted, 81 (footnote 2), 84 (footnote 3), 94 (footnote), 212 (footnote 4), 334

(footnotes 2 and 3)

Santals, an aboriginal tribe of Bengul, 57, their village government, 57, social ceremonies, 58, religion, 58, 59, the Santals under British rule, 59, Santal rising (1855), 59, 60

Satara, Native State, lapsed to the British

for want of heirs (1849), 415

Sati, or widow burning, unknown in the Rig-Veda, 78, abolition of the rite by Lord W Bentinck, 405 Satnámis, a reformed Vishnuite sect in

the Central Provinces, 223

Sátpura, range of mountains in Bombay

and Central India, 35 Sayyid dynasty, The (1414 50 A D ), 286 Scarcities -See FAMINES

Schools - See EDUCATION

Schwartz, Protes'ant missionary in Tan 10re, 260

Scott Waring, Mr Edward, History of the Marathas, quoted, 317 (footnote 1) Sculpture, Greek and Indian types of, 171, 608, 609

Scythic invasions and inroads (126 BC to 544 AD), chap vu pp 174 190 Aryan and Turanian inva sions from Central Asia, 174, Scythic movements towards India, 174, 175, Kanishka's fourth Buddhist Council (40 A D), 175, pre Buddhistic Scythic influences, 175, Buddha a Sakya (2 Scythian), 176, 177, early Tibetan traditions, 177, 178, Sakya race customs, 178, Scythic Buddhism in India, 178, 179, Scythic elements in the Indian population—the Jats and Rajputs, 179, 180, Indian struggle against the Scythians, 180 182, Vik rimaditya's achievements, 181, Ser, Gupta, and Vallabhi dynasties, 182, 183 the pre Aryan element in ancient India, 183, ancient pre Aryan king doms, 184 189, the Takshaks of Rawal Pindi 184, 185, the Nagas, 185, 186, the Ghakkars of Rawal Pindi, 186, the Bhars of Oudh and the North Western Provinces, 187, Koch king dom of Northein Bengal, 187, 188, the Ahams of Assam, 188, Bundelas 188, Gonds, Ahirs, and Bhils of Central India, 189, pre Arjan ab original tribes of Lower Bengal and Southern India, 189, Scythic and Naga influences on Hinduism, and on the religion and domestic life of modein India, 189, 190

Sea borne trade of Butish India, 559 581, the great seaports 559, 560, early European, Portuguese, Dutch, and English traders, 560, 561 advance ment of English trade, 561, 562, Indian trade (1878 85), 563, 564, staples of foreign sea boine import and export trade, 561 581 - Sec also

CONVERCE AND TRADE

Secret orgies in Siva wor-hip, 215

Secretariats of the Government of India, and of the minoi governments, 437 438 Secretary of State's India Council in London, 431

Sect and national classification of the population, Appendix 1, 703

Secular literature of the Hindus, 118 128 - See also chap xm, 'The Indian Vernaculars and their Literature,' 325

Segauli, Treaty of, at the termination of the Gurkha war (1814 15), 400

Selections from the Despatches of the Marquis of Wellesley, by Sidney J Owen, quoted, 317 (footnote 1), Selec tions from the Dispatches of the Duke of

IVellington, by Sidney J Owen, quoted, 317 (footnote 1)

Seleukos, Alexander's successor to his conquests in Bactria and the Punjab (312 306 B C), 166 167, cession of the Punjab to Chandin Gupta, 167, Megas thenes' embassy to Chandra Guptas court at Pataliputra (the modern Patna), 167, 168

Sena dynasty of Surashtra (70 B C 235

AD), 182

Serampur or Fredriksnight settlement of the Danish East India Company (1616), acquired by the English by purchase (1845), 372, Baptist Vission at, founded by Carey, Maishman, and Ward, 260

Serfdom in India, 49

Seringapatam, Capture of, and death of Tipu Sultan, 396, 397

Serpent worship, its influences on Hindu 1sm, 185, 186 serpent ornumentation in Hindrism, Buddhism, and Christi

anity, 202 203

Shah Janan, fith Mughal Emperor of India (1628 58 AD), 302 305, chief events of his reign, 302 (footnote) loss of Kandahar (1653), 303 Deccan conquests, 303 304, Taj Mahal and other architectural work, 304 revenues, 304 (footnote 3), deposed by his rebellious son, Prince Aurang zeb, 305, magnificence of his court,

Shahji Bhon-la, founder of the Maratha power (1634), 317

Shah Shuja installed by the Butish as Amu of Kabul (1839) 407

Shawls, 112, 603, an Indian jewelled shaw !, 604

Sheep as beasts of buiden in the Hima layas, 10

Sheep and goats, 521, 657 Sherring, Rev M A, Hindu Tribes and Castes, 193 (footnote 1) 194 (footnotes 2, 3, and 4), 195 (footnote 2), 221 (footnote 4)

Sher hah, Afghan Emperor of Delhi (1540 45), killed while storming the fottress of Kalinjar, 291

Shote, Sir John, Governor-General of India (1793 98), 394 Shrines common to different faiths, 203

Siam, trans frontier trade with, 589, 590 Sikandra, Tomb of Akbar at, 295

Sikhs, history of the Nanak, the founder of the religious sect, 223, Ranjit Singh, the founder of the kingdom, 410, 411, first Sikh wai (1845) battles of Mudki, Firozsháhr, Aliwal, and Sobraon 411, second Sikh war (1848 49), battles of Chihanwala and Gujiat, 412, 413,

annexation of the Punjab and its pacification, 413, lovalty of the Sikhs during the Mutiny of 1857, 419, 420

Siladitya, Buddhist King of Northern

India (634 A D ), 156

Silk and sericulture, 511 515, the Com panys factories, 511 512, area and out turn, 512, 513, silk weaving in Bengal, Burma, and Assam, 602, 603, jungle silks (tasar), 513, 514, steam silk factories, 603

Silt islands in the Brahmaputra, 14, 15, in the estuaries and along the sea face

of Bengal, 24, 25

Silver — See Precious Metals

Sindhia, the family name of the ruler of the Maratha State of Gwalior in Central India rise of the family to power 322, wars with the English, 323 Singha and Sena dynasties of Surashtra (70 B C. 235 A D ), 182

Smal ud daula, Nawab of Bengal (1756 57), 380 382, capture of Calcutta by, the Black Hole, 380, 381, recapture of Calcutta and the battle of Plassey,

381, 382

Sirhind canal, 532

Sittar, a theistic school of Tamil hym nologists, 332, 333

Siva, the Destroyer and Reproducer, the third person in the Hindu triad, 98, his twofold aspects, 211, 212

Swaji the Great, the cons lidator of the Maratha power (1627 80), 317 319, his hill forts and guerilla warfare, 318, 319 coins money and enthrones

h mself, 319

Siva worship, 210 215, twofold aspects of Siva and his wife - their philo sophical and their terrible forms, 211, 212, human sacrifice, 212, 213, the Charak puja or swinging festival, the thirteen Sivaite sects, 213, 214 gradations of Siva worship, 214, secret orgies in Siva worship, 215, Siva and Vishnu compared, 215

Siwank hills, an offshoot of the Hima

lay as, geology of, 632, 633 Slate, 628

Stave kings, The (1206 90 AD), 278 280, Kutab ud din, 278, Altamsh, the greatest of the Slave kings, 279, the Empress Raziya, 279, Mughal inroads and Rajput revolts, 279, 280, Balban, his cruelties and royal pensioners, 280

Slavery and serfdom, 49

Slow progress of Muhammadans in India, Hindu resistance and internal revolts, reconquest of India from the Musal mans, 269, 270

Smarta Brahmans of Southern India, 209,

Smith, Colonel Baird, Calcutta Journal of Natural History, quoted, 27

Sobráon, Battle of, 411

Somnath, Sack of, by Mahmud of Ghazni (1024 A D ), 293, 274. Somnath proclamation and procession of the so called gates by Lord Ellen borough, 409

Son canal and irrigation works, 534, 535

Spices, Cultivation of, 490, 491

Sridhar, Marathi poet of the 16th century, and compiler of the Marathi paraphrase of the San-krit Puranas, 346

Srimanta Sadagar, famous Bengalı poem of the 16th century by Makunda Ram,

Stamp revenue, 467

State railway system, 547, 548 Statistical Survey of Bengal, completion of, 443

St Bartholomew the Apostle, his preach ings and alleged conversion of India testified to by Pantrenus (190 AD) and Hippolytus (220 A D ), 235

St Thomas the Apostle, the traditionary founder of Christianity in India, 229, 230, the three 5t Thomas of India, and the legends connected with each, 230 232, tradition of the Indian King Gondaphorus and St Thomas 232, 233, Gondaphorus an Indo Scythic Punjab monarch, 233, wide meaning of India in the writings of the Fathers, 233, 234, St Thomas' work in Persia and Central Asia instead of in India proper, 235, localization of the legend of 5t Thomas in North India or Persia, 237, shrine of 5t Thomas at Madras, 237, mixed worship at St Thomas' Vount, Madra, 238, St Thomas relics at Goa, 238, the St Thomas' Nestorian Christians, a powerful and respected military caste in Southern India, 241, downfall of Nestorianism, 241 243

Thomas the Apostle of India, by the Rev Dr Kennet, quoted, 233 (footnote 3), 235 (footnote), 237 (footnote 4),

239 (fuotnote 1) St Xavier, his labours in India, 244, 245 Steel, Mr Arthur, Law and Custom of Hindu Castes, quoted, 195 (footnote 2) Stephens, Thomas, the first authentic English traveller in India, and rector

of the Jesuit College at Salsette (1579 AD), 363, 364 Stevenson, David, Canal and River

Engineering, quoted, 23

Strachey, General Sir R, calculations on the age of the Bengal delta, 28 Straits Settlements, India's trade with, 577, 579, 580.

" trikes' among Indian castes, 198 Su, a Tartar tribe, their overthrow of the Greek settlements in Bactria, 175 Subuktigin, first Turki invader of India (977 A D ), 272

Sudhanwan's alleged persecution of the Buddhists, 191 and footnotes

Súdras, the servile caste of ancient India, 90, 91

Suez Canal, Trade with India via, 564,

565, 581 Sused Koh, range in Afghanistan, an offshoot of the Himalayas, 3 Sugar cane, Cultivation of, 491

Sugar duties, Abolition of Inland (1836), 562

Suláiman range of hills, marking a portion of the western boundary between British territory and Afghanis tan, 3, 6

Sun spot cycles, 650, 651

Sun worship, Traces of, among the San

tals, 58
Surat, English obtain leave to trade at (1612 A D), 366, defeat of the Portu guese fleet at Swally, the port of Surat, by Captain Best (1615 AD), 366 Surat, the chief seat of the Company's government in Western India till 1684 87, when it was transferred to Bombay, 370, Surat pillaged by Sivan (1664), 370, treaty of Surat between Raghunath Rao and the British, 391 Sur Das, poet of Vlathura in the 16th century, and author of the Sursagar,

'Survey' land tenure in Bombay, its simplicity, advantages, and disadvan

tages, 448, 449

Sutley, great river of the Punjab and chief tributary of the Indus, II

Sutras or sacred Sanskrit traditions, 89 Swally, Defeat of the Portuguese fleet at

(1615), 366 Swedish East India Company, 376 Synod of Diamper (1599 A D), 241 Syrian Christians in India, their numbers and antiquity, 230 Syrian Catholics in Malabar, 243, 244, Syrian rite re formed, 245, Syrian and Roman Catholic Christians at the present day,

257, 258

#### т

Táj Mahal, The, 112, 304 Takht i Suláiman, mountain in the Sulai mán range, 6

Takkas, a Turaman race, and the earliest inhabitants of Rawal Pindi District, 164 (footnote 2), their present descend ants, 184.

Talshaks, an early Scythian tribe in the Punjab, 184, 185

Tal, mountain pass over the Brahui hills from the Punjab into Baluchistán, 6

Talikot, Battle of, and overthrow of the Vijayanagar kingdom (1565 A D ), 288 Talukdars or great landlords of Oudh,

Tamil, the oldest and most influential of the vernacular literatures of Southern India, 330, first cultivation of Tamil by the sage Agastya, 330, 331, Jain cycle of Tamil literature from the 9th to the 13th century, 331, its great Pariah poet and poetess (900 A.D?), 331, the Tamil Ramayana, 331, Sivaite and Vishnuite Tamil hym nologies, 332, the Sittar or anti Brahmanical Tamil poets of the 17th century, 332, modern Tamil writers, 333, Beschi, the Jesuit priest, 333, recent statistics of Tamil literature, 333

Tantrik sect of Siva worshippers, 214 Tartar overthrow of Greek conquests in Bactna, 175 -See also SCYTHIC IN

VASIONS

Tasar, or jungle silkworm, 34, 513, 514 Tassy, Garcin de, Historie de la Littera ture Hindowie et Hindowstanie, quoted, 343 and footnote 1

Taxation of India under the Mughal Emperois (1593 1761 A D ), 299, taxa tion under the Mughals and the Bitish, 463, 464, taxation in Native States, 464, incidence of taxation in British India, 464, 465 — See also FIVANCES and REVENUE SYSTEM

Taxila, ancient town in Rawal Pindi District, Punjab, the home of the Takkas, identified with the ruins of Deri Shahan, 164 (footnote 2), 184.

Tea cultivation and manufacture, 504 509, indigenous to Assam, 504, early experiments and failures, 504, 505, rapid progress of the industry, 505 statistics of out turn, 505 507 varieties of the plant, 508, the work of a teagarden, 508, 509, export of tea, 575

Teak forests, 39, 42

Tegnapatam (Fort St David), East India Company s factory established at (1686 92), 371

Temperature of various meteorological stations in India, 647 649 -Sec also METEOROLOGY OF INDIA

Temple's, Sir R, Minute on the balance of Indian trade, 581 583 Tenancy (Bengal) Bill, 429

Tenant right in Bengal, compensation for

disturbance, 444, 445
Thage or professional strangling, Suppression of, by Lord W Bentinck, 405

Thall Ghát, mountain pass in the Western Ghats, 37

Thána, a Jesuit station (1550 AD), its colony of Christian craftsmen and cultivators, 247, 248

Thání ráyats, or stationary husbandmen,

Theistic movements in Vishnuite reli gious reforms, 223, theistic hymns, 332, 333 Thomas the

Apostle, Thomas Manich ean, and Thomas the Armenian merchant, conversion of India variously ascribed to -See chap ix, 'Christi

anity in India,' 229 238

Thomas, Mr E, Paper on the Sah and Gupta coms, in the Report of the Archaelogical Survey of Western India for 1874 75, quoted, 147 (footnote), 172 (footnotes I and 2), 175 (foot note 3), 182 (footnotes I and 4), Junusm, or the Early Faith of Asoka, 160 (footnote), Revenue Resources of the Mughal Empire, 271 (footnote), 297 (footnote 2), 293, 301 (foot note 1), 304, 305 (footnote), 311 (footnote), Chronicle of the Pathan Kings of Delhi, 271 (footnote), 280, 281 (footnotes), 283 (footnotes 1 and 2), 284 (footnote), 285 (footnote 3), 287 (footnote 2), 291 (footnote), 298 (foot note 2)

Major William, Memoir of Thorne's, the War in India conducted by General

Lord Lake, 317 (footnote 1) Tibetan ideas and early traditions of

Buddhism, 176 178

Tibeto Burmans, non Aryan tribes of he lower Himalayas, their languages, 63, 68 Tiger, The Indian, 652, 653, man cat ng

tigers, 653

Tile pottery of the Punjab and Sind, 608 Timber trees, 34, 39, 41 -See also FOREST DEPARTMENT

Timur (Tamerlane), Invasion of India by (1398 A.D.), 285

Tin in British Burma, 42, 626

Tipu Sultan, son of Haidar Ali, second Mysore war (1790 94), 394, third Mysore war (1799), fall of Seringa patam and death of Tipu, 396, 397

Tista, river of Bengal, its changes of

course, 30 Titles of Sava and his wife in their different Aryan and non Aryan forms, 211, 212

Tobacco cultivation and manufacture, growth of the trade, 42, 499, 500

Tod, Colonel, Annals and Antiquities of Rájasthan, quoted, 180 (footnotes 1 and 3), 184 (footnote 2), 185 (foot notes 1 and 3)

Todar Mall, Akbar's Hindu general and finance minister, his revenue settlement, 293, 300

Tolerant spirit of Hinduism, 226, 227 Topographia Christiana (Paris, 1707), quoted, 183

Towns and villages of British India classi fied according to population, Appendix II, 690

Towns of British India with a popula tion exceeding 20,000, Appendix VIII, 696, 697

Towns, Absence of large, in India, 46 Trade and commerce — See COMMERCE AND TRADE

Trade, Tabular statement of, with foreign

countries, 579

Trade guilds, 197, 198, guild funds and charities, trade versus caste interests, 198, 199, caste a 'mutual insurance, and substitute for a poor law, 199

Trade unions — See TRADL GUILDS Trading castes in Northern and Southern India, 591, 592

Tranquebar, settlement of the Danish East India Company (1616), acquired by the English by purchase (1845), 372

Trans Himalayan tiade, 586 590 Treasure, Import of, proportion of gold to silver, gold and silver currency, 568, 569

Treaties, Early Indo Greek (306 and 256 BC), 166 170

Tree and Serpent Worship, by Dr J Fergusson, quoted, 204 (footnote 1)
Tribes of the North Western Provinces, by Sir Henry Elliot, 195 (footnote 2)

Troubles of the early Indian Church, 240

Trumpp, Dr E, Grammar of the Sindhi Language, quoted, 335

Tsan pu, the libetan name for the upper waters of the Brahmaputra before it forces its way through the Himalayas,

Tue chi overthrow of the Græco Bactrian settlement in the Punjab, 175

Tughlak dynasiy, The (1320 1414 AD), 283 286, Chiyas ud din Tughlak (1320 24), 283, Muhammad Tugh lak (1324 51), 283, his cruelties, forced currency, etc., 283, 284, revolt of the Provinces, 284, revenue exac tions, 284, 'man hunts,' 284, 285, Firuz Shah Tughlak (1357 88), 285, Mahmud Tughlak, 285, Timur's inva sion (1398), 285, ruin of the Tughlak dynasty (1399 1414), 285, 286 Tukarám, Maratha Vishnuite religious

poet of the 17th century, 346

Tungabhadra irrigation works, 536 Turanian and Aryan inigrations into India from Central Asia, 174, 175

Túrkí invasions of India, 272 Turmeric, Export of, 575

#### U

Udhanála, Battle of, and defeat of Mir Kásım, 386

Umá, the Aryan form of the wife of Siva, 211, 212

Unbeaten Tracks in Japan, by Miss Bird, quoted, 152 (footnore 3), 202 (foot

note 1), 224 (footnote 3) Under peopled Districts and Provinces,

Unequal pressure of population on the land, 49

United States, India's trade with, 578, 579

Universities, Indian, 475, 476

Upendra Bhanj, Raja of Gumsar, a famous Uriya poet, 344

Uraons an aboriginal tribe of Kols in Western Bengal and Chutia Nagpur, 71 (footnote)

Uriya vernacular writers and poets, 343, 344

Usmán's Arab expedition to Thana and Broach (647 A D ), 268

Usurpation of Aurangzeb, and murder of his brothers, 306, 307

Vaiseshikha, one of the six daisanas or Brahmanical systems of philosophy, 99

Vaisya or cultivating caste of ancient

India, 90, 196

Valabhi, ancient Indian dynasty in Western India and Sind (480 722 AD), their overthrow by Arab

invaders of Sind, 182 Vallabha swami, Vishnuite religious re former (1520 A D), Krishna worship,

221, 222

Válmiki, the reputed composer of the Ramayana, 123

Vararuchi, Prakrit grammanian of the

Ist century B C, 336, 337 Vasco da Gama—his three voyages to India, and death at Cochin, 356 358

Vedantas, two of the six darsanas, or Brabmanical systems of philosophy,

Vedas, the four Sanskrit hymnals, 77 89, their antiquity and inspired origin, 78, caste and widow burning unknown, 78, Aryan civilisation in the Veda, 79, the gods of the Veda, 78 81, a Vedic hymn 82, 83 Vedic prayers, 83, 84, Vedic legend of Yama, YOL VI

the king of death, 85, Vedic conceptions of immortality, 86, the Rig Veda composed during the march of the Aryans through Upper India, 86, 87, the Sama Veda, Yajur Veda, and Atharva Veda composed at a later date than the Rig Veda, after the Bráhmans had established their priestly power, 88, the Brahmans or inspired guides to the four Vedas, 88, 89

Vegetables, Cultivation of, 490 Vellore, Mutany of (1806), 399

Velvet work, 603

Verapoli, Roman Catholic Vicariate, 257 Vernacular journalism, 480, 481

Vernaculars (Indian) and their Literature, chap xin pp 325 355 - See Indian Vernaculars and their LITFRATURE

Viceroys and Governors General of India, 384

Victoria Čitika, a Sanskrit ode, in celebration of the sovereigns of Eng land, III

Victoria Point, marking the extreme eastern and southern limits of British India, at the mouth of the Kra river. the boundary between Tenasserim and Siam, 4

View of Hindu Law, by Mr Nelson. CS, 195 (footnote 2)

Vijayanagar, Hındu kıngdom India (1185-1565 AD), Southern subjugation by the Muhammadans at

the battle of Talikot, 286, 288
Vikramaditya, King of Ujjain (57
BC), his war with the Scythian

invaders, 181
Vincent's, Dean, Commerce and Nam gation of the Ancients in the Indian Ocean, quoted, 164 (footnote 1), 356 (footnote)

Vindhyas, range of mountains, 35, 36, geology of, 635

Vishnu, the Preserver, the second person of the Hindu trimity, 98 -See also HINDUISM

Vishnuite symbols in Hinduism, 206 Vishnu Purána, The, by Dr H H Wilson, quoted, 216, 217, and foot

Vishnu worship, 215 226, Vishnu and Vishnu, 215 216, the Vishnu Purana, the eighteen Purana, 216, 217, Brahmanical and popular Vishnuism, 217, Vishnuite religious reformers (1150, 1520 A D ), 217 222, Vishnuite sects 223, theistic movements in Vishniism. 223, Jagannath, 223 225, the truth about the Car Festival, 224, 225, bloodless worship of Jagannath, 225,

3 B

Vital statistics of India, chap xxv 665 686 The principal sources of lealth returns, 665 untrustworthy reg stration statistics, 666, 667, death rate and average duration of life in Ind a. 666, 667, birth and death rates for different Provinces, 667 679, health and mortality in the European army, 675, 680-682, in the native aim), 682-684, jail vital statistics, 684-686

Von Bohlen, Das Alte Indian, quoted, I IO (footnote 2)

Vyasa, Brahman sage, the legendary compiler of the four Vedas (3101 B C), and of the epic of the Mahabharata,

## W

Wandewa-h, Battle of, and defeat of the French under Lally (1761), 379, 380 War, Art of, in Vedic and Sanskrit times, 110

Wargaum, Convention of (1779), 391 Warorá coal-field in the Central Pro

vinces, 620

W arren Hastings - Sa PASTINGS, WARREN

Water mills in the Himá ayas, 9

Watson, Admiral, bombaidment and capture of Chandarnagar, 382

Weber, Professor, History of Indian Literature, quoted, 94 (footnote), 102 (footnote 1), 105 (footnote), 110 (footnote 1), 127 (footnote 3), 154 (footnote), 168 (footnote 2), 172 (foot

notes 2 and 3), 175 (footnote 1), 176 (footnote 3), Indische Studien, quoted, 161 'sootnote 1)

Wellessey, General (afterwards Duke of Wellington)—the victories of Assaye

and Argaum, 323, 398 Wellesley, Marquis of, Governor General of India (1798 1803), 394 397, French influence in Ind a, 394, 395, Lord Wellesley's scheme, 395, 396, treaty with the Nizam, 396, third Mysore war and storming of Seringapatam, 396, 397, second Maratha war (1802 04) and annexations to British territory, 398, Brit sh successes and disasters, 348

Western Ghats mountain range along the western coast of India, 36, 39, its passes, 36, 37, rivers, 37, rainfall 38, forests, 39

Western Jumna Caral, 29, 532 Wheat, Statistics of cultiva ion and out turn of, 486-488, export of, 573

Whitney, Professor, Sanskrit Grammar, quoted, 334 (footnote 1)

Widows, Position of, in ancient India, 78 Williams, Professor Monier, 114, 129 (footnote 1)

Willoughby, Sir John's attempt to force an eastern passage along the north

of Europe and A-1a, 363
Wilson, Dr H H, Works of, quoted, 110 (footnote 1), 127 (footnote 2), 154 (footnote 1), Ariana Antiqua, 175 (footnote 1), Vishnu Purana, 180 (footnote 4), 216, 217 (footnotes), Essays, 191 (footnote 2), Religion of the Hindus, 201 (footnote 2), 205 (footnote 1), 206 (footnote 2), 210 (footnote 2), 221 (footnote 2), 223 (footnotes 3 and 4)

Wilson, Dr J, Indian Caste, quoted, 194 (footnote 1), 195 (footnote 2),

110 (footnote 1)

Wilson, Mr James, his financial reforms

after the Mutiny, 424
Wise, Dr T A, Review of the History Vedicine among the Asiatrics, quoted, 110 (footnote 1) Wolf, The Indian, 654

Women, Position of, in ancient India, and in Vishnu worship, 78, 221 Wood carving, 112, 609

# X

Xavier, St Francis, his work in India, 244, 245

# Y

Yajnavalkya's Code of Hindu Law, 114, 115

Yajur Veda, The, 88

Yak cow, The, a remarkably sure footed beast of burden in the Himalyas, 9,

Yama, the Hindu god of death, Vedic legend of, 85

Yandabu, Treaty of (1826), 403, 404 Yavanas, the name applied to Greeks and Scythians by the Brahmans, 93,

172, 173 Yoga, one of the six dur anas or Brah manical systems of philosophy, 99

Yogis, a sect of Sixaite devoteus, 214.

Yoma mountain range in Burina, 6 I ule, Colonel Henry, Marco Polo, quoted, 151 (footnote 5) 152 (footnote 1), 231 (footnote 1), 233 (footnotes 1 and 2), 237 (footnote 4), 238 (footnotes), 239 (footnote 3), 356 (footnote), Cathay and the Way Thither, 233 (footnote 2), 283 (footnote 5)

Z

Zamindari grant of the Twenty four Parganas, 383
Zamindars or revenue land collectors under the Mughals, converted into a proprietary body by the Permanent Settlement of Bengal, 439, 442
Zoology and Botany of India, chap ALIV pp 652 664 The Gujarat or

maneless hon, 652, tiger, 652 leopard cheetah, 653, 654, wolf, fox, jackal dog, 654, bear, 655, elephant and elephant catching, 655, 656, rhinoceros 656, wild boar and hog, 656, 657, sheep and goats, 657, antelope and deer, 657, 658, bison and buffalo 658, birds of prey and game b rds 659, reptiles, 660, 661, insects, 662 Indian flora, 662 664

END OF VOLUME VI